AGENCY RESPONSE TO PUBLIC COMMENTS RECEIVED ON PROPOSED REGULATIONS

VIRGINIA SOIL AND WATER CONSERVATION BOARD

4 VAC 50-60, General Virginia Stormwater Management Program (VSMP) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (Final)

May 5, 2008 version

#	Commenter	Comment	Agency response
1	Mike Gerel (Chesapeake Bay Foundation)	The proposal now applies more stringent requirements for MS4s that discharge to waters covered by a Total Maximum Daily Load (TMDL), requires additional self-evaluation and reporting by all MS4s, and clarifies and expands the six minimum control practices.	It is agreed that the proposed general permit adds specific requirements for MS4s that discharge to waters covered by a TMDL, requires self-evaluation and reporting by all MS4s, and clarifies the six minimum control measures.
2	Mike Gerel (Chesapeake Bay Foundation)	CBF finds that the current proposal should be modified to add more prescriptive and enforceable requirements for MS4 discharges to waters that already violate water quality standards.	See Note #2 below.
3	Mike Gerel (Chesapeake Bay Foundation)	MS4s that discharge to impaired waters should be required to document compliance with water quality standards. The proposal includes a new requirement that MS4s identify any impaired waters into which they discharge and "address" the impaired waters into which they discharge. However, the proposal does not explicitly prohibit discharges that violate water quality standards or require specific actions in response to such discharges to those impaired waters.	See Note #2 below.
4	Mike Gerel (Chesapeake Bay Foundation)	To fully meet federal requirements when a TMDL is not in place for an impaired water, CBF recommends that DCR require MS4s at a minimum to: 1) Conduct outfall monitoring consistent with that required in the proposal for discharges to waters covered by a TMDL to determine whether the pollutant of concern causing the impairment is present in the MS4 discharge, and if present, 2) implement actions called out in the MS4 Program Plan specifically directed at addressing the pollutant of concern, which may include full implementation of new or existing policies, source reduction activities, stormwater best management practices, or other	Regarding impaired waters, see Note #2 below. In addition, regarding outfall monitoring, monitoring requirements in the general permit are consistent with EPA's recommendations regarding monitoring. Limited monitoring at facilities where the operator has 100% control of the discharge is required when a wasteload has been allocated to the operator. Similarly, additional visual monitoring requirements are placed on operators for MS4 outfalls that discharge into the waterbody designated in the TMDL WLA. EPA recommends that, in general, NPDES permits for small MS4s should not require the conduct of any additional monitoring beyond monitoring that the small MS4 may be already performing. In the second and subsequent permit terms, EPA expects that some limited ambient monitoring might be appropriately required for perhaps half of the regulated small MS4s. EPA expects that

		technology-based requirements, and 3) create an administrative record in accordance with 40 CFR §124.9 and 124.18 that documents the effectiveness of selected actions in ensuring the pollutant of concern in the discharge is reduced sufficiently to meet water quality standards.	such monitoring will only be done in identified locations for relatively few pollutants of concern. EPA does not anticipate ''end-of-pipe'' monitoring requirements for regulated small MS4s. 64 FR 68769 (December 8, 1999). The MS4 Program specified by the General Permit meets federal requirements. The control measures focus on and address well-documented threats to water quality associated with storm water discharges. EPA believes that implementation of the six minimum measures will, for most regulated small MS4s, be adequate to protect water quality, and for other regulated small MS4s will substantially reduce the adverse impacts of their discharges on water quality. 64 FR 68789 (December 8, 1999). EPA envisions application of the MEP standard as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards. Successive iterations of the mix of BMPs and measurable goals will be driven by the objective of assuring maintenance of water quality standards. If, after implementing the six minimum control measures there is still water quality impairment associated with discharges from the MS4, after successive permit terms, the permittee will need to expand or better tailor its BMPs within the scope of the six minimum control measures for each subsequent permit. EPA envisions that this process may take two to three permit terms. 64 FR 68731 (December 8, 1999). Finally, as to the application of 40 CFR 124.9 and 124.18 to the General Permit, those sections apply specifically to permitting situations in which EPA is the permitting authority. State programs, including this action, develop a regulatory record in accordance with other regulations. This action is being conducted in accordance with the requirements of the Virginia Stormwater Management Permits (VSMP) Program regulations (4VAC50-60-10 et seq.) (see also 40 CFR 123.25, which contains requirements for State Programs).
5	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Add language to the regulation that explicitly states that MS4 discharges are not authorized that cause or contribute to violation of water quality standards.	See Note #2 below. The General Permit does address potential violations of water quality standards in its design process. The iterative BMP process that is employed by an MS4 Program Plan requires evaluation and refinement of BMPs to reduce all pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Section I of the General Permit additionally contains requirements for situations where a TMDL WLA has been assigned. MS4 operators are

			additionally required to consider impaired waters in putting together their plan. All of these requirements must be considered by MS4 operators seeking coverage under the General Permit.
6	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Add a requirement that MS4s that discharge to an impaired water should monitor and document that they are not contributing to the impairment.	See the response to comment #5 above.
7	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Add a provision that DCR will develop and employ an adaptive management process to facilitate monitoring, reporting, remediation, and enforcement against discharges found to contribute to an existing impairment.	The General Permit contains requirements for operators of MS4 systems. It is not the proper document for describing an outreach and enforcement program to be administered by the Department.
8	Mike Gerel (Chesapeake Bay Foundation)	MS4s that discharge nutrients and sediment to the Bay watershed should be required to meet specific measurable benchmarks and timetables that achieve the pollution reductions called for in the Chesapeake Bay Tributary Strategies and the Chesapeake 2000 Agreement by the end of the five-year permit cycle. The proposal does not include deadlines for MS4s to comply with these programs or take specific actions to reduce discharged nutrients and sediment to the Bay watershed in accordance with tributary strategy requirements.	As to the application of the Tributary Strategies to the General Permit generally, see Note #3 below. As to compliance with the Tributary Strategies and other goals within a 5-year period, it is recognized that the iterative process employed by MS4s may cause several permit terms to be necessary in order to achieve specific goals. An example of this is contained in an EPA rulemaking, which specifies that "[i]f, after implementing the six minimum control measures there is still water quality impairment associated with discharges from the MS4, after successive permit terms the permittee will need to expand or better tailor its BMPs within the scope of the six minimum control measures for each subsequent permit. EPA envisions that this process may take two to three permit terms." 64 FR 68731 (December 8, 1999).
9	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Add language to the regulation that the following benchmark requirements must be met within the specified milestone after issuance of the permit and must be included in the MS4 Program Plan: (a) 12 months: Evaluate and report on status of source reduction, erosion and sediment control (ESC), Chesapeake Bay Act (Bay act), stormwater management (SWM), and nutrient management planning (NMP) efforts. (b) 24 months: Ensure full implementation of all applicable source reduction actions (e.g. public education, inspection, infiltration and inflow control, storm drain marking and clean out, street sweeping, pet waste management, and trash recycling/collection/clean up). (c) 36 months: Confirm via DCR program	The timeframes suggested by the comment are believed to be inappropriate for imposition in a General Permit. EPA recognizes that development and implementation of BMPs could take as long as the first two to three permit cycles (64 FR 68731, December 8, 1999). After that time (2012), EPA will revisit requirements for MS4s. Some of the requested actions are currently included in the General Permit. For example, MS4s will need to report annually (pursuant to Section II (E)) on the status of Erosion and Sediment Control and Stormwater Management implementation. The intent of the MS4 Program is to provide flexibility to MS4 operators in order to reduce pollutants to the maximum extent practicable, to protect water quality, and to satisfy the applicable requirements of the Clean Water Act. The Tributary Strategies do not account for many of the BMPs that are employed by MS4s in this process. The iterative process followed by MS4s does

		review full ESC, Bay act, and general SWM construction permit program compliance. (d) 48 months: Update local comprehensive plans, ordinances, policies, procedures, and contracts as appropriate to facilitate compliance with these provisions. (e) 60 months: Achieve numeric requirements of the tributary strategy by ensuring the following urban BMPs are in place over the specified percent acreage of the MS4: Tree planting (urban lands – 5%, mixed open lands – 7%); Buffers (urban lands and mixed open lands – 5%); Structural SWM (14%- could be met through installation of new traditional BMPs – ponds, filtration, manufactured BMPs - , new low impact development practices – rain gardens, green roofs, infiltration – or retrofit existing BMPs); Nutrient management planning (urban lands – 99.3%, mixed open lands – 78.4%)	require that BMPs be employed and refined that will result in load reductions. EPA has clarified that local land use practices, such as forested buffers, are beyond the scope of the Clean Water Act. 64 FR 69761 (December 8, 1999) ("The rule provides the MS4 operator with the flexibility to determine the appropriate BMPs to address local water quality concerns and EPA recognizes that land use planning is within the authority of local governments"). The Department likewise questions the Board's authority to require the implementation of land use practices and the requested practices within the confines of the General Permit. Based on existing conditions, the requirements cited by the comment could lead to overly stringent permit requirements, and excessive and expensive controls on stormwater discharges not necessary to provide for attainment of water quality standards. Conversely, these quantitative requirements could be not stringent enough to provide for attainment of water quality standards. The Department believes that the flexible, iterative approach of implementing BMPs appropriate to the MS4 is the proper approach to further progress toward the attainment of water quality standards.
10	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Add a requirement that DCR will employ an adaptive management process to facilitate documentation, remediation, and enforcement against discharges that do not meet these provisions.	The General Permit contains requirements for operators of MS4 systems. It is not the proper document for describing an outreach and enforcement program to be administered by the Department.
11	Mike Gerel (Chesapeake Bay Foundation)	Ensure that any numerical waste load allocations (WLA) assigned to a MS4 in an EPA-approved TMDL is included in the MS4 general permit.	See Note #1.
12	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Add language to the regulation that numeric WLAs assigned to an MS4 in an EPA-approved TMDL report should be included in the regulation.	See Note #1.
13	Mike Gerel (Chesapeake Bay Foundation)	Specific modification requested: Create a separate registration list that will accompany the regulation that lists numeric WLAs that have been assigned to MS4s. This approach is already in use for Virginia's Chesapeake Bay Watershed Nutrient Credit Exchange Program.	This request has not been incorporated into the regulation. An updated list of approved TMDLs is available at the DEQ website, https://www.deq.virginia.gov/TMDLDataSearch/ReportSearch.jspx, and is searchable by, among other things, City/County.
14	William Skrabak (City of Alexandria)	Outfall Reconnaissance (4VAC50-60-1240 Section I.B.6) The City recommends eliminating the requirement to inspect all stormwater outfalls during the permit period. The proposed outfall reconnaissance	Outfall inspection is the most effective method to determine whether an MS4 is discharging a pollutant of concern in situations involving Wasteload Allocations. This method of monitoring discharges provides valuable evidence of the effectiveness of an MS4 Program and provides information regarding the location of the source of a water quality impairment

		language will require localities subject to a TMDL stormwater wasteload allocation to inspect all outfalls during the five year permit period regardless of an assessment of potential risk. This approach represents a particular burden for larger MS4 Phase II communities such as Alexandria, which has identified over 430 stormwater outfalls.	while preventing the high costs associated with other types of monitoring. The requirements for outfall monitoring have been retained, although amendments have been made to Section I (B)(5) (formerly (B)(6)) that adjust and cap outfall reconnaissance requirements.
15	William Skrabak (City of Alexandria)	Outfall Monitoring (4VAC50-60-1240 Section I.B.7 The City recommends eliminating or modifying the requirement to conduct wet-weather water quality monitoring. As proposed, this requirement when implemented for like kind of facilities, will be cost prohibitive and due to the redundancy may not be necessary or useful. Should the Board pursue wet-weather monitoring, the City recommends allowing localities to monitor a representative sample of facilities with similar characteristics. This will allow the City to characterize pollutant loadings for certain land uses to determine if selected BMPs are appropriate for the drainage area, while ensuring that the cost of monitoring does not diminish the City's ability to apply more stringent BMPs should they be determined to be necessary.	As part of the required evaluation of all municipally owned or controlled properties, the operator must determine those properties that may be discharging pollutants identified in a TMDL wasteload allocation. The Department believes that requiring the monitoring of those facilities over which the operator has control or ownership is a reasonable monitoring requirement to ensure consistency with the TMDL.
16	William Skrabak (City of Alexandria)	Low Impact Development (4VAC50-60-1240 Section II.B.5) The City recommends eliminating the requirement to track the number of acres developed utilizing low impact development (LID) principles until the Board promulgates specific guidance on what qualifies as reportable LID practices under the terms of this permit program. At this time, there is no consistent State-wide guidance regarding LID guidance or performance standards. Further, it is unclear what threshold would be used for determining if a site qualifies as reportable LID. As a result, the information reported would be arbitrary and meaningless for comparative purposes.	The requirement to track the number of acres developed utilizing low impact development in 4VAC50-60-1240, Section II.B.5 has been removed. It is agreed that until a definitive list of LID practices is developed, it is difficult to categorize a practice as LID rather than as any other stormwater management facility. Rather, these facilities will be captured along with data related to other practices in (B)(6) of Section II.
17	John M. Carlock (Hampton	Compliance dates Even though the regulations are	By the time the revised General Permit becomes effective, it will have been under development for over a year. While specific requirements of the permit will

	Roads Planning District Commission)	scheduled to take effect July 1, 2008, all localities will already have approved budgets by that time. No significant increases in stormwater programming would be feasible until the next budget cycle. It is our concern that any number of localities could be technically out of compliance as of July 1, 2008 given the current wording of various sections of the regulations.	not become final until adoption of a final regulation by the Board, localities have had notice that this revised permit would be forthcoming, and much of the permit is a continuation and clarification of existing requirements contained within the existing general permit. Additionally, it is anticipated that this final permit will be adopted by the Board at its May 2008 meeting, allowing MS4 operators 2 months to make necessary adjustments prior to the actual effective date of the permit.
18	John M. Carlock (Hampton Roads Planning District Commission)	Terminology Terms such as "eliminate" and "ensure" used throughout the regulations are unrealistic because the operator cannot control the actions or guarantee the compliance of third parties, such as its residents. The localities, as operators under this permit, can merely promote compliance and educate residents about the importance of various compliance issues addressed in the permit.	Federal Regulations require compliance from MS4s. 64 FR 68765 specifies that: "The Agency [meaning EPA] did not design the minimum measures in § 122.34 [of Title 40 of the Code of Federal Regulations] to 'commandeer' state regulatory mechanisms, but rather to reduce pollutant discharges from small MS4s. The permit requirement in CWA section 402 is a requirement of general applicability. The operator of a small MS4 that does not prohibit and/or control discharges into its system essentially accepts 'title' for those discharges. At a minimum, by providing free and open access to the MS4s that convey discharges to the waters of the United States, the municipal storm sewer system enables water quality impairment by third parties. Section 122.34 requires the operator of a regulated small MS4 to control a third party only to the extent that the MS4 collection system receives pollutants from that third party and discharges it to the waters of the United States. The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties."
19	John M. Carlock (Hampton Roads Planning District Commission)	Reporting As you likely already know, the Hampton Roads Planning District staff and the region's localities are working with a consultant to develop a regionally consistent web-based reporting system that will meet the needs of the affected Phase I and Phase II localities. It is our recommendation that this system be used as a model for consistent statewide reporting, as no such mechanism has been developed to date. It is critical for localities to know what and how they are to report prior to the effective date of the revised regulations.	The current language of the permit clearly identifies what information is required to be reported. At this time, no set format is required. The Department has previously discussed with HRPDC its intention to coordinate with the PDC in the development of a database/reporting system and to consider the utilization of some or all of the system that HRPDC has developed.
20	John M. Carlock (Hampton Roads Planning District	Specific references References to specific federal and state documents and websites are included throughout the regulations. These references should be	It is anticipated that the documents referenced in the General Permit will be made available on the Department's website or in a guidance document. The references have been retained within the language of the General Permit, however, so that they may be found within that language as well.

	Commission)	incorporated into a guidance document to assist affected localities with maintaining compliance and not in the actual regulations and permit language.	
21	John M. Carlock (Hampton Roads Planning District Commission)	"Maximum extent practicable" or "MEP" – the subcommittee has concerns about the limitations associated with *"rejecting BMPs only when the BMPs would not be technically feasible or the cost would be prohibitive and unreasonable"*. While one could interpret this to provide flexibility, one could just as easily determine that this in fact limits an operator from eliminating certain BMPs because of other limitations such as maintenance requirements or specific local concerns.	The definition of "Maximum extent practicable" contained in 4VAC50-60-10 has been amended to specify that, "MEP is achieved, in part, by selecting and implementing effective structural and nonstructural best management practices (BMPs) and rejecting ineffective best management practices (BMPs) and replacing them with effective best management practices (BMPs)." It is believed that this amendment addresses the concern raised by the comment.
22	John M. Carlock (Hampton Roads Planning District Commission)	"MS4 Program" – The proposed additional language *("to protect water ... attendant regulations")* adds a new requirement for MS4 Programs above and beyond the already aggressive technology standard of "maximum extent practicable" (MEP). While the language is somewhat unclear, it might be mistakenly read as incorporating additional water quality standards requirements beyond the maximum that is practicable. The Hampton Roads Phase II communities support retaining the existing definition and deleting the proposed modification.	The amended language of the General Permit is in accordance with federal requirements and does specify that operators are required to develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable (MEP), to protect water quality, to ensure compliance by the operator with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act and regulations. Much of this language was contained in the existing permit that the new General Permit is replacing. The language also specifies, however, that implementation of best management practices consistent with the provisions of an iterative MS4 Program required pursuant to this section constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable", protects water quality in the absence of a TMDL wasteload allocation, ensures compliance by the operator with water quality standards, and satisfies the appropriate water quality requirements of the Clean Water Act and regulations in the absence of a TMDL WLA.
23	John M. Carlock (Hampton Roads Planning District Commission)	4VAC50-60-1230. Permit application (registration statement). It should not be the responsibility of the operator to determine all interconnection points of any other MS4s. DCR should take on the responsibility for informing operators of all of their surrounding interconnected regulated small MS4s or other regulated MS4s.	The permit does not require that MS4s determine the MS4s who discharge into their system. It requires that the MS4 determine and notify those to which it discharges. As the actions of interconnected systems impact each other, it is more sensible to develop the communication between MS4s.
24	John M. Carlock (Hampton	General Permit: Section 1240 SECTION I.B.1	As requested by the comment, section 1.B.1 of Section 1240 of the general permit already specifies that: "The operator shall update its MS4 Program Plan to include

	Roads Planning District Commission)	This schedule may prove unrealistic for some TMDLs and their associated Implementation Plans, given the highly participatory nature of these efforts. It is our recommendation that operators be given at least 18-24 months to adapt its MS4 Program to be consistent with an associated TMDL Implementation Plan and as a course of this planning effort, the operator will comply with Item 2 (a) and 2(b) below: SECTION I.B.2.c Review and updates for ordinances in particular require advance public notification and participation, as well as being impacted by a variety of other local issues, policies and priorities. While one can develop plans and timetables, in this instance it is critical that no penalty be associated with missing the deadlines on those milestones, provided that communication on the status of such effort is occurring regularly with DCR.	measurable goals, schedules, and strategies to ensure MS4 Program consistency with the TMDL [WLA] <u>within 18-months of permit coverage; or, within 18-months of the effective date of any reopening of this permit</u> to include wasteloads allocated to the regulated small MS4 after issuance of permit coverage." The schedule required by Section 1.B.2.c is to be developed by the operator. The operator should be able to set forth a schedule that it believes to be attainable based on all relevant considerations.
25	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section 1.B.6 This section requires the operator to "...develop *and implement outfall reconnaissance procedures to identify and eliminate the discharge of the pollutant identified in the WLA from anthropogenic activities."* A binding regulatory requirement to "eliminate discharge of a pollutant" irrespective of the technical and financial feasibility of elimination is wholly inappropriate. If the standard remains in this reconnaissance section, that standard should be "minimize" as stated in I.B.7. rather than "eliminate." In addition, the regulations stipulate that reconnaissance shall be performed on all outfalls during the permit cycle. This is an excessive burden. However, if required at all, it should apply only to major outfalls. Such a program will require at least 24 months from the effective date of the permit to plan prior to implementation.	The language of Section 1.B.6 has been amended to specify that "The operator shall develop and implement outfall reconnaissance procedures to identify and <u>reduce</u> the discharge of the pollutant identified in the WLA from anthropogenic activities <u>in a manner consistent with the TMDL</u>." (new language underlined). EPA regulations and guidance require that NPDES permits require the monitoring necessary to assure compliance with permit limitations. The Department feels that outfall monitoring is a more appropriate monitoring program than other alternatives, such as chemical monitoring. The requirement for monitoring of all outfalls during a 5-year permit cycle has been changed as follows: a. Should the operator have 250 or more total outfalls discharging to the surface water identified in the WLA, the operator shall perform reconnaissance on a minimum of 250 outfalls for each WLA assigned at least once during the 5-year permit period and shall perform reconnaissance on a minimum of 35 outfalls per year. b. Should the operator have less than 250 total outfalls discharging to an identified surface water, the operator shall perform reconnaissance on all outfalls during the 5-year permit period and shall annually conduct reconnaissance on a minimum of 15% of its known

			MS4 outfalls discharging to the surface water for which the WLA has been assigned.
26	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section I.B.7. This section requires an excessive amount of monitoring and related expense. At a minimum, we recommend this section be phased in during the life of the permit and revised to provide that sampling and monitoring be performed only if the source in question cannot be shown to be reduced by other methods.	Section 1.B.7 does not require monitoring of all sites; rather, all sites must be evaluated, and only those sites where the operator determines that the pollutant identified in the WLA is currently stored, or has been transferred, transported or historically disposed of in a manner that would expose it to precipitation must be monitored. The frequency of monitoring has been clarified. The amended permit language specifies that a total of two samples shall be taken annually.
27	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section I.B.8 and I.10.b Estimates of stormwater discharge are highly subjective and variable. In addition, gallons are not the recommended industry standard unit of measurement.	The requirement for the estimate of stormwater discharged to be expressed in gallons has been changed to cubic feet.
28	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section II.A Requiring public comment for at least 30 days prior to submitting the MS4 Program Plan reduces the amount of time available to localities to complete the requirements to review update the existing MS4 Program Plan. Localities will need the full 180 days to complete this task and an additional 30 days for public review. The Department should provide specific guidance on what it considers to be reasonable notification methods if the expectation is more than traditional public noticing.	The time periods specified in Section II (A) have been removed. Requirements for public noticing of the MS4 Program Plan and modifications have been relocated to minimum control measure 2, public involvement and participation, located in Section II (B)(2). While public notice and opportunities for public comment are required, no particular method or time frame is required so long as any method employed is reasonably calculated to give notice to the affected public. Copies of all written comments received are required to be submitted with the operator's annual report as specified in Section II (E).
29	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section II.B 1.a-e The use of the term "Increased" relative to knowledge levels implies some sort of quantitative evaluation of all of the efforts mentioned. This is both time-consuming and costly, which means time and funding would have to be diverted from carrying out the actual programs necessary to increase knowledge and awareness of pollution prevention measures. A more appropriate term would be to "promote awareness." Acceptable evaluation methods should be addressed in a guidance document issued by the	It is expected that as a part of the development of the Program Plan, including the elements cited by the comment, operators will assess current progress on the required items in order to establish "benchmarks" to which future progress can be compared. The original language has been retained.

		Department.	
30	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section II.B.2. a-b The measurable goals described in these paragraphs are basic tenets of the Freedom of Information Act and are a routine part of public administration. They need not be spelled out in these regulations.	Although the requirements of these sections mirror requirements of the Freedom of Information Act, their presence does no harm to the permit and reminds operators of FOIA requirements as they apply to their programs. The requirements have been retained.
31	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section II.B.3.b This section requires the mapping of all outfalls in the regulated small MS4. This is overly burdensome, particularly to smaller communities. The existing requirement for mapping all major outfalls is sufficient.	40 CFR 122.34(b)(3)(ii)(A) requires that a small MS4 must "develop, if not already completed, a storm sewer system map showing the location of all outfalls. . . " State regulations and associated permits are required to be, at a minimum, as stringent as federal regulation. The proposed permit change to require mapping of all "outfalls" corrects a deficiency in the initial MS4 General Permit.
32	John M. Carlock (Hampton Roads Planning District Commission)	General Permit: Section 1240 Section 11.E.2(j) This section pertains to data tracked under Section II B 5 b (6) and (7). Hampton Roads localities are concerned about the requirement that this submittal be in a database format prescribed by the department." We understand this may relate to pending or incomplete state database development efforts and are concerned about the ability to comply. The HRPDC staff and the localities recommend utilizing the regional system currently under development as a model for statewide reporting requirements.	The Department has previously discussed with HRPDC its intention to coordinate with the PDC in the development of a database/reporting system and to consider the utilization of some or all of the system that HRPDC has developed.
33	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center)	<u>Issue #1 – Discharges to impaired waters when a clean up plan has not been established</u> Specifically, the proposed MS4 Permit must ensure that MS4 discharges do not cause or contribute to violations of water quality standards.	For a response on impaired waters in a non-TMDL situation generally, see Note #2 below.
34	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center), John P.	First, the language of the permit should explicitly prohibit discharges that contribute to violations of water quality standards and require individual review of the authorized discharge and a greater effort from the permit holder if discharges do contribute to a violation. This requirement is already used in other stormwater permits in Virginia, and many other states have	The General Permit does address potential violations of water quality standards in its design process. The iterative BMP process that is employed by an MS4 Program Plan requires evaluation and refinement of BMPs to reduce all pollutants to the maximum extent practicable, to protect water quality, to ensure compliance by the operator with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act. Section I of the General Permit additionally contains requirements for

	Tippett (Friends of the Rappahannock)	included provisions in their Phase II MS4 permits prohibiting discharges of pollutants which would lead to a violation of state water quality standards.	situations where a TMDL WLA has been assigned. MS4 operators seeking coverage under the General Permit must consider all of these requirements.
35	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center)	Second, establish procedures that must be followed if it is determined that an MS4 has a reasonable potential to cause or contribute to a water quality standard violation. If the cause of a listed impairment is a pollutant commonly found in municipal discharges or specifically found in a MS4 discharge, appropriate monitoring and remediation actions should be required.	See Note #2 below.
36	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center), John P. Tippett (Friends of the Rappahannock)	Issue #2 – Specifying practices consistent with Tributary Strategies Under 40 C.F.R. 122.34(e)(2), the "permitting authority may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality." The federal guidance for small MS4 permits states that "If the (small MS4) program is inadequate to protect water quality, including water quality standards, then the permit will need to be modified to include any more stringent limitations necessary to protect water quality" (64 FR 235). To be consistent with these regulations, the proposed MS4 Permit must be modified to include the more stringent limitations identified in Virginia's Tributary Strategies.	See Note #3 below.
37	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center), John P. Tippett (Friends of the Rappahannock)	Because the current draft small MS4 permit regulations do not address the Tributary Strategies or the Chesapeake Bay water quality standards, they are inadequate to achieve Virginia's water quality standards. We believe that the regulations must include quantitative, measurable requirements to ensure that MS4 operators implement pollution-reducing best management practices at levels called for in Virginia's Tributary Strategies.	As to numerical effluent limits and the appropriateness of BMPs instead of numerical limits, see Note #1 below. As to the Tributary Strategies generally, see Note #3 below. The General Permit does address potential violations of water quality standards in its design process. The iterative BMP process that is employed by an MS4 Program Plan requires evaluation and refinement of BMPs to reduce all pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Section I of the General Permit additionally contains requirements for situations where a TMDL WLA has been assigned. MS4 operators are additionally required to consider impaired waters in putting together their plan. MS4 operators seeking coverage under the General Permit must consider all of these requirements.

			The iterative process required by the General Permit (and the federal and state MS4 regulations) requires evaluation and refinement by MS4 operators to determine the suitability and effectiveness of selected BMPs, and the modification and/or substitution of those BMPs where determined necessary and appropriate. The General Permit does incorporate elements of the Tributary Strategies where appropriate. For example, it requires consistency with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Law, both of which are goals of the Tributary Strategies.
38	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center)	In order to make the draft Small MS4 General Permit regulations comply with federal requirements and meet water quality standards, we recommend that DCR modify the proposed regulations to include the following quantitative requirements for each MS4 as specified in the Virginia Tributary Strategies: (a) Stormwater management practices shall be applied to 14 percent of the MS4 acreage (b) Forest buffers shall be applied to 5 percent of MS4 acreage (c) Tree planting shall be applied to 6 percent of MS4 acreage (d) Nutrient Management shall be applied to 27 percent of the pervious acreage of the MS4.	The intent of the MS4 Program is to provide flexibility to MS4 operators in order to reduce pollutants to the maximum extent practicable, to protect water quality, and to satisfy the applicable requirements of the Clean Water Act. The Tributary Strategies do not account for many of the BMPs that are employed by MS4s in this process. The iterative process followed by MS4s does require that BMPs be employed and refined that will result in load reductions. EPA has clarified that local land use practices, such as forested buffers, are beyond the scope of the Clean Water Act. 64 FR 69761 (December 8, 1999) ("The rule provides the MS4 operator with the flexibility to determine the appropriate BMPs to address local water quality concerns and EPA recognizes that land use planning is within the authority of local governments"). The Department likewise questions the Board's authority to require the implementation of land use practices and the requested practices within the confines of the General Permit. Based on existing conditions, the requirements cited by the comment could lead to overly stringent permit requirements, and excessive and expensive controls on stormwater discharges not necessary to provide for attainment of water quality standards. Conversely, these quantitative requirements could be not stringent enough to provide for attainment of water quality standards. The Department believes that the flexible, iterative approach of implementing BMPs appropriate to the MS4 is the proper approach to further progress toward the attainment of water quality standards.
39	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center)	We recommend that the first step for each MS4 in the process be to assess and report on the status of the best management practice implementation. We also recommend that the regulations provide flexibility for each MS4 to develop an alternative plan, using accepted practices and pollution removal efficiencies, to reach the same	MS4s are required to assess and report on the status of BMP implementation in their annual reports, which are required Section II (E)(1) of the General Permit. As discussed in the preceding comments, the intent of the iterative BMP process called for by the General Permit is to allow flexibility for each MS4 to reduce pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate

		level of pollution reduction as called for in the Tributary Strategies. The permit should allow a menu of accepted treatments to satisfy stormwater management practices, so that each MS4 operator can select the treatments that are most effective and appropriate for their locality.	requirements of the Clean Water Act. EPA has provided a list of BMPs that may be utilized by MS4s. This list can be found at: http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm See Note #3 below for a response regarding Tributary Strategies.
40	William H. Street (James River Association), Richard A. Parrish (Southern Environmental Law Center), John P. Tippett (Friends of the Rappahannock)	Issue #3 – Inclusion of waste load allocation in the associated MS4 Permit In cases where a formal TMDL has been developed and a waste load allocation (WLA) has been assigned to an MS4 operator, the draft small MS4 permit regulations do not ensure that the WLA is included in the applicable permit. While the Program Plan must be modified to identify best management practices that will be implemented related to the TMDL, it does not ensure that the WLA, and therefore the water quality standards, will be met. Including specific WLA's in the MS4 permits would clarify the obligation of the MS4 to achieve water quality standards to the maximum extent practicable.	See generally Note #1 below. Federal guidance published 11/22/02 affirms that NPDES-regulated stormwater discharges must be addressed by the WLA component of a TMDL. However, the guidance recognized that the allocations may be fairly rudimentary because of data limitations and variability in the system. This is true in Virginia. As a condition of this permit, DCR is requiring MS4s to provide a better description of their system in hopes of more accurate assignment of WLAs. EPA, in both the 2002 guidance and the Interim Permitting Approach for Water Quality Based Effluent Limits in Storm Water Permits, reaffirms the ability of the permitting authority to express water quality based effluent limits in the form of Best Management Practices. In the case of MS4s, numeric effluent limits are infeasible based on the intermittent and variable nature of the types of discharges and their effects on the receiving waters. The infeasibility holds true whether the numeric effluent limit is a numeric standard or a wasteload allocation established as part of a Total Maximum Daily Load study. An iterative BMP-based strategy is the appropriate effluent limitation for MS4 permits. This permit provides additional permit requirements that require the operator to review and strengthen its program and BMPs to assure consistency with the TMDL. The permit further requires implementation of BMPs designed to identify potential sources and reduce their discharge in a manner consistent with the TMDL. The permit also assures consistency with the TMDL and the iterative permitting process by requiring annual reviews and updates of the MS4 program plan based on additional TMDL information including that of any TMDL Implementation Plan. The comment to place numeric WLAs into the permit has not been incorporated.
41	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-10. Definitions "Operator" is defined in the context of stormwater associated with construction activity. Recommend also defining operator in the context of a MS4. When addressing this topic relative to MS4 in the preamble to the federal regulations, EPA also provided	An amendment has been made to the definition in 4VAC50-60-10 to provide clarification. It now includes the text, "In the context of stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s), operator means the operator of the regulated MS4 system."

		some discussion on owner-operators that would be relevant here.	
42	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-10. Definitions It appears the term "Stormwater Management Program" was replaced throughout the regulation with the term "Municipal Separate Storm Sewer System Management Program". Recommend eliminating the definition for "Stormwater Management Program".	The term MS4 program and proposed modifications were made to eliminate the confusion regarding a separate State program under which localities will adopt a construction stormwater management program. The definitions contained in 4VAC50-60-10 are applicable to the entire set of stormwater regulations (which include both MS4 and construction site programs), therefore this definition must be retained.
43	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1230.B.4. Recommend that the registration statement only include the estimated drainage area discharging directly to an impaired segment of a receiving surface water versus to any impaired receiving surface waters.	The language of the registration statement has been amended to include the suggestion made by the comment. Operators are reminded, however, that TMDLs are assigned on a watershed basis and that it is possible that an operator may be assigned a WLA for a contribution to a downstream impairment.
44	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section 1.B.6. This section requires reconnaissance procedures to identify and eliminate the discharge of pollutants identified in an applicable WLA from anthropogenic activities. The guidance to conduct the reconnaissance pertains specifically to illicit discharges versus any anthropogenic activity. Additionally, the following item (Section 1.B.6) addresses evaluation of all potential sources of the pollutants. Recommend replacing "anthropogenic activities" with "illicit discharges as defined in this Chapter".	TMDLs are based on the total input of pollutants from all sources. There are inputs into MS4 systems from non-regulated sources, such as wildlife, responsibility for which it would be inappropriate to assign to the operator. Therefore, the language has been retained.
45	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section 1.B.7. This section requires the operator to evaluate "all properties owned or operated" by the MS4 operator for potential sources of the pollutant identified in the WLA. Is the intent for the MS4 operator to evaluate all properties discharging to the MS4? If so, is it accurate to imply that the MS4 operator owns or operates all the property that discharges to the MS4? If not, the privately owned property (the majority of most MS4s) would not be evaluated and the evaluation/characterization would be significantly incomplete. This section also requires the operator to conduct a site evaluation and	The intent of Section 1.B.7 is for the MS4 operator to evaluate all properties owned or operated by the MS4 operator; not all properties discharging through an MS4 outfall. MS4 operators have control over discharges from sites that they own or operate, where they may not have full control over sites that they do not own or operate. Section 1.B.7 currently specifies that the site characterization is to be conducted in accordance with the schedule set out in its subsections, and it is believed to be unnecessary to additionally note this in the paragraph above that specification.

		characterize the runoff for those properties where it determines that the pollutant identified in the WLA is currently stored, transferred, transported, or historically disposed of in a manner that would expose it to precipitation. Although it may be implied, recommend that "characterize" be qualified by adding "as described in items 7a & 7b below". It should be recognized that properties where the pollutant identified in the WLA are currently stored, transferred, transported, or historically disposed in a manner that would expose it to precipitation may actually have little potential to discharge the pollutant. Recommend that the trigger for monitoring properties be based on a significant potential for discharge of the pollutant identified in the WLA rather than just storage, transfer, transport, or disposal. The analysis could be based on materials storage and handling practices but should also include factors such as the amount of material stored and handled, the frequency of handling/transfer, and the proximity to storm drains or surface waters. 4VAC50-60-1240. Section 1.B.7.a. Previous comment on "properties owned or operated by the MS4" applies. If the intent is to sample the outfalls of properties discharging to the MS4, representative samples from each property would be a very significant burden. Recommend clarifying that the MS4 operator should sample outfalls from properties selected to represent different pollutant sources or maybe land use categories of the properties comprising or discharging to the MS4.	
46	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section 1.B.8. This section states that the operator shall conduct an annual characterization (volume and quantity) of the total pollutant discharged by the MS4 in a unit consistent with the WLA. Is this annual characterization to be developed from the sampling data required in Section 1.B.7? If so, it should be stated. If not, guidance should be provided on how to perform the characterization. If the data	The annual characterization required by Section 1.B.8 is not developed from the sampling data required by Section 1.B.7. The method to be utilized in conducting an annual characterization is left flexible for determination by each MS4, so long as it is consistent with the underlying TMDL; the Department will consider the issuance of guidance on conducting the characterization.

		required in Section 1.B.7 is to be used, guidance on how to conduct a meaningful characterization is also required. If all representative samples are not collected during the same year and season the annual total characterization (volume and quantity) of the pollutant discharged by the MS4 could not be derived. The guidance should also discuss how to scale up the results from the representative samples and how to address the variability inherent with stormwater sampling. Even with this guidance the value of the characterization as an evaluation of the effectiveness of the MS4 in reducing the pollutant or meeting the WLA will be questionable. If the pollutant load estimated by the characterization shows the MS4 may not be meeting a WLA, will this trigger an enforcement action?	
47	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section II.B.3.b. Recommend deleting here and combining with similar requirements in the registration statement.	The requirement in section 1240, section II (B)(3)(b) has been retained, as these maps must be updated with any changes that occur after the reapplication has been made.
48	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section II.B.3.f. Since it is not always feasible to eliminate illicit discharges, recommend that the narrative include not only how illicit discharges were eliminated, but also if they have been covered by another permit.	If an illicit discharge obtains authorization to discharge in accordance to NDPES regulations, the "illicit discharge" has been eliminated. The definition of illicit discharge in 4VAC50-60-10 makes it clear that discharges having VPDES or VSMP permit coverage are not illicit discharges.
49	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section II.B.4.c. This section requires the operator to track "regulated" land disturbing activities. Does 'regulated' include only those land disturbing activities requiring a VPDES permit or also those requiring submittal of an erosion and sediment control plan (10,000 square feet)?	The definition of land-disturbing activities contained in 4VAC50-60-10 explains that the term includes all activities regulated pursuant to the federal Clean Water Act, the Virginia Stormwater Management Act, and the Virginia Stormwater Management Regulations. These activities would be those that require VSMP permit coverage (and not those that require only the submittal of an erosion and sediment control plan).
50	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section II.5.b (1). Recommend adding "of the MS4" after local community.	The phrase "of the local community" has been amended to "of the operator's community" to increase clarity.
51	Cherryl F. Barnett (Department of the Navy)	4VAC50-60-1240. Section II.B.5.b (4). Recommend adding "to the extent allowable under state, tribal or local law or other regulatory mechanism" to the first sentence.	The recommended amendment has been made to Section II (B)(5)(b)(4).
52	Cherryl F. Barnett	4VAC50-60-1240. Section II.B.5.b (6).	The formal definition of Low Impact Development (LID) is being developed through a separate regulatory

	(Department of the Navy)	Recommend including a definition of "low-impact development principles" in 4VAC50-60-10. Also recommend that any database format provided by DCR for reporting purposes include a listing of structural and non-structural LID categories to be used by the permittees.	action. DCR believes that it is not appropriate to include a formal definition of LID at this juncture. Therefore, the term "low impact development" has been removed from 4VAC50-60-1240, section II, subsections (4)(a)(2) and (5)(b)(1) and replaced with "Where determined appropriate by the operator, the operator shall encourage the use of structural and non-structural design techniques to create a design that has the goal of maintaining or replicating predevelopment runoff characteristics and site hydrology." This introduces the concept of low impact development in a manner that provides clarity and flexibility in definition for the operators to incorporate into their programs.
53	J. Michael Flagg (Hanover County)	We are increasingly concerned about the tracking and monitoring requirements under the MS4 permit. The program appears to be moving away from protecting water quality and instead is focusing on the reporting of every type of information including information that DCR already has at its disposal. We recommend minimizing reporting requirements to the extent practicable.	Section 122.48 of title 40 of the Code of Federal Regulations requires that monitoring be representative of the monitored activity. The Department is aware of operator concerns with monitoring and reporting, and the General Permit attempts to keep monitoring and reporting requirements to the minimum possible while still allowing the minimum criteria required by federal regulation to be met.
54	J. Michael Flagg (Hanover County)	We recommend the removal of all website addresses from the regulation. These addresses change over time.	The website addresses have been retained within the General Permit in order for easy access by operators. The Department may issue updates in the form of guidance should it be discovered that these addresses change.
55	J. Michael Flagg (Hanover County)	4VAC50-60-10. Definitions. "Grassed swale" including the term "check dams" appears unnecessary. Grass swales do not always include check dams and this definition seems to require them.	This is beyond the scope of this regulatory action, as only definitions directly affecting the MS4 General Permit are being considered for amendment. This definitional change may be considered, however, in a separate action that the Department is undertaking to revise the portions of the regulations affecting construction site stormwater management.
56	J. Michael Flagg (Hanover County)	4VAC50-60-10. Definitions. "Maximum extent practicable (MEP)" The definition provided in the Draft regulation is inconsistent with the EPA's discussion presented in the December 8, 1999 Federal Register discussions of "Maximum Extent Practicable" page 68754 establishing the phase II stormwater regulations. Based on the Federal Register, we recommend the following definition: *"Maximum Extent Practicable (MEP)" the technology-based discharge standard establishing the level of pollutant reductions that MS4 operators must achieve. Compliance with the general permit and the series of steps associated with the identification and implementation of the minimum control*	Modifications have been made to the definition of "maximum extent practicable" which, while not adopting the definition suggested by the comment verbatim, are believed to address the concerns of the comment.

		measures will satisfy the MEP standard. The MEP standard is *an iterative process that can continually adapt to current conditions and BMP effectiveness.* Although the EPA did not provide a definition of the MEP, note that the definition provided above is similar to the definition in the Federal Register for the MS4 Phase II program. We feel that the definition currently provided in the regulation does not need to discuss implementation, but should reflect EPA's discussions regarding MEP.	
57	J. Michael Flagg (Hanover County)	4VAC50-60-10. Definitions. "Municipal separate storm sewer system management program" or "MS4 Program" this section states that the program will "satisfy" the appropriate water quality requirements. Conditions may exist beyond the control of the operator that prevent satisfying the water quality requirements through the MS4 permit alone. We recommend replacing the word "satisfy" with "address".	Section 122.34(a) of the Code of Federal Regulations requires that a MS4 will, at a minimum, develop, implement and enforce a program designed to reduce the discharge of pollutants from the MS4 "to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act." The recommendation has not been incorporated.
58	J. Michael Flagg (Hanover County)	4VAC50-60-10. Definitions. "Total maximum daily load" 40 CFR 130.2 provides a definition of TMDL. We recommend defining "daily'; in the context it is used in the definition. The definition should state that daily, in this context means average daily load over a 12 month period.	This is beyond the scope of this regulatory action. The requirement of the VSMP program is to require that the permits meet the conditions of any TMDLs. The definitions of TMDLs, wasteloads and associated language are not a part of this regulatory action. Permit language is consistent with appropriate federal and state regulation.
59	J. Michael Flagg (Hanover County)	4VAC50-60-10. Definitions. "Water Quality Standards" We recommend deleting the second sentence and instead provide a reference where these standards are found. See the edited text below: <u>"Water quality standards" or "WQS" means narrative statements that describe water quality requirements in general terms and numeric limits for specific physical, chemical, biological or radiological characteristics of water.</u> ~~These narrative statements and numeric limits describe water quality necessary to meet and maintain reasonable and beneficial uses such as swimming and other water based recreation, public water supply and the~~	The definition of "water quality standards" has been changed to correlate with 9VAC25-260-5, not 9 VAC 25-720-10, as this definition is more appropriate to MS4 permitting. The definition now reads, "<u>Water quality standards" or "WQS" means provisions of state or federal law which consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for such waters based on such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia) and the federal Clean Water Act (33 USC § 1251 et seq.).</u>"

		~~propagation and growth of aquatic life.~~	
60	J. Michael Flagg (Hanover County)	4VAC50-60-1200. Definitions. "MS4 Program Plan" We recommend replacing the words "to reduce" with "manage". The current wording implies that an increase in pollutants in storm water discharge mean that there is not an MS4 program plan. However pollutants will be managed in all cases. (e.g if pollutants were to increase, the plan will include a reaction by the operator under the provisions permit.)	The goal of the MS4 program is the reduction of pollutants. Therefore, it is appropriate that the "MS4 Program Plan" being designed to reduce pollutants, rather than simply manage them. The original wording of the definition has been retained.
61	J. Michael Flagg (Hanover County)	4VAC50-60-1220 C This section should not require action from the operator outside of the scope of the MS4 permit. This section should state spills reported under the provisions of 40 CFR 117 and 302 are not the responsibility of the operator.	Section 1220(c) specifically applies to nonstormwater discharges <u>into the regulated small MS4</u>, and 1220(c) does state that: "this permit does not transfer liability for a spill itself from the party(ies) responsible for the spill to the operator nor relieve the party(ies) responsible for a spill from the reporting requirements of 40 CFR Part 117 and 40 CFR Part 302 (2001)."
62	J. Michael Flagg (Hanover County)	4VAC50-60-1230 B 4 This section states that the registration statement must provide the estimated area served by the MS4 discharging to any impaired receiving water. Note that the definition of "discharge" appearing in the regulation does not apply here.	The usage of the term "discharging" is believed to be appropriate and it has been retained.
63	J. Michael Flagg (Hanover County)	4VAC50-60-1230 B 7 a (2) The responsible parties identified in this section should be plural "individuals, departments, divisions, or units ... ".	The requested amendment has been made to section 1230(B)(7)(a)(2).
64	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Section I B We do not support addressing TMDL under the MS4 permit. However, if these requirements are retained, we feel that the MS4 permit should not be modified to address load allocations associated with a TMDL until an implementation plan is developed. If there is no implementation plan, there are no specific actions that have been defined for the MS4 to take.	40 CFR § 130.2(h) stipulates that VSMP [NPDES]-regulated discharges must be addressed by the wasteload allocation component of a TMDL. 40 CFR § 144(d)(1)(vii)(B) requires that permit conditions be consistent with the assumptions and requirements of available TMDLs. Therefore, the General Permit must address the TMDL. As numeric effluent limits are not the most appropriate manner to address stormwater discharges, EPA recommends that regulated MS4 water quality effluent limits will be in the form of BMPs.
65	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Section I B 1 c We recommend the following modification to the general permit requirements: <u>c. The operator shall develop a schedule to ~~implement procedures and strategies~~ to address the MS4 Program weaknesses including a timetable to</u>	The language of section I(B)(1)(c) has been amended to add clarity. Much of the original language has been retained, however.

		update the existing ordinances ~~and legal authorities~~, policies, plans procedures and contracts to ensure consistency with the TMDL. ~~When possible, source elimination shall be prioritized over load reduction.~~	
66	J. Michael Flagg (Hanover County)	4VAC50-60- 1240 Section I B 5 We believe that the TMDL should be addressed through the implementation plan and not through the MS4 permit.	TMDLs are required to be dealt with in the General Permit. 40 CFR 122.44(d)(1)(vii)(B) requires that NPDES permit effluent limitations be consistent with the assumptions and requirements of available WLAs.
67	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect I B 2 Ordinances and legal authorities are already required to implement the MS4 program. Reiterating and summarizing legal authorities in this case appears to be a paperwork exercise that will do little to address pollutants, or determine the effectiveness of the MS4 program as discussed in this section. Please remove these additional tracking and reporting requirements.	Ordinances and legal authorities may be required to be updated over time to address MS4 Program Plan and TMDL requirements. It is appropriate to continue to require tracking and reporting of them to ensure that they continue to permit the operator to meet permit requirements.
68	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect B 6 This section states that outfall reconnaissance procedures will be developed to identify and "eliminate" the discharge of pollutants. Outfall reconnaissance procedures are used to detect pollution. Other types of procedures are used to eliminate pollution. These statements seem misplaced here and should be discussed under a separate line item. Some of these procedures to eliminate pollution could be long term such as developing plans and funding for putting a neighborhood on public sewer.	The language of section 1240, section II(B)(6) has been amended to clarify that reconnaissance procedures identify the discharge of pollutants, whereas other types of procedures must be utilized to reduce the discharge of pollutants.
69	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect I B 8 The characterization outlined in this section goes beyond the 6 minimum control measures in addressing the WLA assigned in the TMDL. Any estimates or modeling to be accomplished should be done by the DEQ and other state agencies charged with these tasks.	40 CFR 122.34(e)(1) requires that the operator comply with any more stringent effluent limitations contained in the permit, including permit requirements that modify or are in addition to the minimum control measures based on an approved TMDL. The section additionally provides that a permitting authority (i.e., the Board) may include such more stringent discharge limitations based on a TMDL when it determines that they are needed to protect water quality.
70	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect I B 9 and l0a The state already has this information and it appears that reporting this information would be redundant. The requirement should be deleted.	The former subdivision (9) (now subdivision 8) is not a reporting requirement; rather, this subdivision requires that the operator updated its MS4 Program Plan to include any new information related to the TMDL. The former subdivision 10(a) (now subdivision 9(a)) requires the reporting of changes to the MS4 Program Plan,

			which the Department will not have absent this reporting requirement.
71	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect I B l0b This section could be consolidated with section 9 of this part.	It is not believed that consolidation of the two noted sections would serve to enhance clarity of the permit or shorten the required language. The suggested amendment has not been made.
72	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II A This section states that the MS4 operator must improve waters identified in the 2006 integrated report. Section 1230 B 4 references the "most recent" integrated report. The reference to this report and the report identified in the registration statement in 4 VAC 50-60-1230 B 4 should both identify the 2006 integrated report. Obtaining the drainage areas for the "most recent" report (1230 B 4) which may have been issued a short time before the registration statement is due may be an impossible task to complete. Section II A also discusses the applicability of Section 1. Section I already applies to MS4s, restating this in this section is redundant. We recommend eliminating "in the absence of a TMDL wasteload allocation ... where a WLA is applicable" to the end of the paragraph, or clarifying what these statements mean. This section is quite confusing. We recommend the following modification at the end of the third paragraph: Copies of all *written* comments received *during the public comment period* shall be submitted with the proposed schedule to the department.	The reference to the “most recent” integrated report has been changed to the “2006” report. While references to additional requirements for situations involving TMDLs in Section II may appear redundant to those familiar with the permit language, it is believed that including this language in Section II is useful to those not familiar with the permit to explain that conditions other than those imposed by that section may be applicable. The suggested amendments to the end of the third paragraph of Section II(A) have been made; however, requirements for public noticing of the MS4 Program Plan and modifications have been relocated to minimum control measure 2, public involvement and participation, located in Section II (B)(2). While public notice and opportunities for public comment are required, no particular method or time frame is required so long as any method employed is reasonably calculated to give notice to the affected public. Copies of all written comments received are required to be submitted with the operator’s annual report as specified in Section II (E).
73	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 1 a-d We suggest including the word "promote" at the beginning of each of these sections.	The requirements of subdivisions (a)-(d), as written, define the measurable goals for a public education program. The program should be implemented with these measurable goals in mind. These measurable goals do not weaken the flexibility available to operators in designing and implementing a program; however, adding the language suggested by the comment would weaken the requirements of this section. The suggested amendments have not been made.
74	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 3 b This section states that a storm sewer system map is required showing all known outfalls. We recommend calling this an outfall location map. Storm sewer system map implies that this is a	The present requirement for a “storm sewer system” map has been retained, as 40 CFR 122.34(b)(3)(ii)(A) requires that permittees develop a storm sewer system map showing the locations of all outfalls and the names and locations of all waters of the United States that receive discharges from those outfalls.

		map of the entire storm sewer system.	
75	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 3 e Please modify this section as noted: f. Track the number of illicit ~~discharges identified~~, *discharge incidents and* provide narrative on how they were ~~eliminated,~~ *managed* and submit the information in accordance with Section II E 2; and We believe this language is more concise as it relates to a specific incident and allows action over time as needed rather than immediate elimination (e.g. a subdivision being placed on public sewer may take several years to implement, or it may take some time to determine what the source of the illicit discharge is.).	The referenced section has been changed to require that a narrative be provided on how illicit discharges were controlled or eliminated. This amendment is believed to be consistent with the suggestion of the comment. The wording of the permit that requires permittees to track the number of illicit discharges identified has been retained.
76	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 4 a (1) Please modify this section as noted: ... as well as sanctions to ~~ensure~~ *enforce* compliance with the Erosion and Sediment Control Law and attendant regulations	The language of Section II (B)(4)(a)(1), which specifies that sanctions are to be included to ensure compliance with the Erosion and Sediment Control Law and regulations, embraces the concept of enforcement actions being one method to be utilized. Changing the term "ensure" to "enforce" would serve to narrow the terminology and limit the authorities of permittees. Therefore, the term "ensure" has been left in the permit.
77	J. Michael Flagg (Hanover County); Constance Bennett (York County); Kristel Riddervold (City of Charlottesville)	4VAC50-60-1240 Sect II B 4 a (2) The word "plant" in this section should be "plan".	The suggested amendment has been made.
78	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 5 b (1) Remove the reference to promoting low impact development. We do not believe that there is a benefit to promoting one single type of BMP over another.	The formal definition of Low Impact Development (LID) is being developed through a separate regulatory action. DCR believes that it is not appropriate to include a formal definition of LID at this juncture. Therefore, the term "low impact development" has been removed from the regulations and replaced with "Where determined appropriate by the operator, the operator shall encourage the use of structural and non-structural design techniques to create a design that has the goal of maintaining or replicating predevelopment runoff characteristics and site hydrology."
79	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 5 b (3) This requirement should go into the next modification of the regulation. It is	Under the current stormwater regulations, construction site operators receive coverage under the VSMP General Permit for Discharges Associated with Construction Activities upon the filing of a completed

		not currently the operator's role to require construction site operators to secure authorization. Our current ordinances require evidence of a valid permit or filing of the filing of an application. It would make more sense to modify these responsibilities when localities are required to take over responsibilities for the VSMP permit. If we adopt these requirements later, our ordinances would only need to be modified to take these responsibilities once.	registration statement. While this situation may change in the future based upon revisions to the VSMP regulations, at the current time, requiring evidence of a valid permit or of the filing of a registration statement would be equivalent to requiring construction site operators to prove authorization.
80	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 5 b (6) Define "low impact development principles". What does the tracking of this information provide us? Please remove this tracking requirement from the regulation.	The formal definition of Low Impact Development (LID) is being developed through a separate regulatory action. DCR believes that it is not appropriate to include a formal definition of LID at this juncture. Therefore, the term “low impact development” has been removed from 4VAC50-60-1240, section II, subsections (4)(a)(2) and (5)(b)(1) and replaced with “<u>Where determined appropriate by the operator, the operator shall encourage the use of structural and non-structural design techniques to create a design that has the goal of maintaining or replicating predevelopment runoff characteristics and site hydrology</u>.” This introduces the concept of low impact development in a manner that provides clarity and flexibility in definition for the operators to incorporate into their programs.
81	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 6 a (2) We recommend stating that illicit discharges should be eliminated to the extent practicable. Spills can certainly be minimized but not all illicit discharges can be "eliminated".	While spills cannot be eliminated completely, the intent of the section is to require that illicit discharges that have been discovered be eliminated.
82	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II B 6 a (4) Soil is a material that is erodible. This section should state that products that could pollute surface waters should be protected from exposure to surface runoff and precipitation.	Good housekeeping and pollution prevention efforts should include those for soils, as soil is a pollutant if discharged through the MS4 outfall.
83	J. Michael Flagg (Hanover County)	4VAC50-60-1240 Sect II E 2 h This section should require the reporting of illicit discharges and how they were "managed" since some illicit discharges will take time to investigate and eliminate.	The referenced section has been changed to require tracking on how illicit discharges were <u>controlled</u> or eliminated. This amendment is believed to be consistent with the suggestion of the comment.
84	J. Michael Flagg (Hanover County)	4 VAC 50-60-1240 Sect II E 2 j This section discusses reporting all known storm water management facility data in a prescribed format. We recommend eliminating the word "database" in this section, as it appears	It is not believed that Section II (E)(2)(j) imposes any new tracking requirements for operators located in areas affected by the Chesapeake Bay Preservation Act. The word “database” has been retained, as the Department does anticipate the development of a

		unnecessary. In addition, please provide a phase in period for any new tracking or reporting procedures.	database for reporting. Until such a system is developed, it is preferred that reporting be achieved electronically, in Microsoft Word, Excel, or ASCII text delimited.
85	J. Michael Flagg (Hanover County)	4 VAC 50-60-1240 Sect III C 2 Please clarify what forms will be used.	Information under this section may be reported in any format that includes date, sample location, parameters, method, and results with the operator's annual report. Clarifying language has been added to the section cited by the comment.
86	Michael Schaefer (Virginia Municipal Stormwater Association)	"Maximum extent practicable" or "MEP" – VAMSA agrees that MEP is the federal standard applicable to MS4s pursuant to section 402(p) of the Clean Water Act, that it is an iterative standard that evolves and is implemented over time, and that the MS4 program requires periodic assessment as part of that iterative process. However, VAMSA is concerned that two aspects of the proposed definition are inappropriate. Our first concern is language stating that MEP is "achieved, in part, by ... rejecting BMPs only when the BMPs would not be technically feasible or the cost would be prohibitive and unreasonable." This provision eliminates the flexibility that the U.S. Environmental Protection Agency ("EPA") intended when crafting the Phase 2 regulation at 40 CFR Part 122. We agree that the regulation should not require technically infeasible BMPs. We also agree that the regulation should not require BMPs, the cost of which is "prohibitive and unreasonable." But we disagree that localities should be required to fund and implement any and all BMPs that do not reach these rather extreme thresholds. Under the Board's proposal, for example, a BMP must not be rejected by the operator if the cost is unreasonable but not also prohibitive. It is unreasonable for the regulation to require the imposition of unreasonable costs simply because that cost is not also prohibitive (e.g., where the locality is capable of raising taxes or fees high enough to cover unreasonably expensive measures). At a minimum, the "reject only when the cost is prohibitive" standard must be deleted. But beyond that change,	The definition of "Maximum extent practicable" contained in 4VAC50-60-10 has been amended to specify that, "MEP is achieved, in part, by selecting and implementing effective structural and nonstructural best management practices (BMPs) and rejecting ineffective best management practices (BMPs) and replacing them with effective best management practices (BMPs)." It is believed that this amendment addresses the concern raised by the comment.

		we seriously question whether Virginia should require spending to the point of unreasonableness as the benchmark for compliance. Therefore, consistent with EPA's own explanation and with VAMSA's objective of improving water quality through approaches that are both environmentally and fiscally sustainable, VAMSA requests deletion of the phrase "and rejecting BMPs only when the BMPs would not be technically feasible or the cost would be prohibitive and unreasonable."	
87	Michael Schaefer (Virginia Municipal Stormwater Association)	A second point is that the last sentence of the MEP definition adds language regarding compliance with water quality standards, which is out of place in this definition of a technology standard. Accordingly, VAMSA recommends ending the last sentence after "BMPs, etc." and deleting the remainder of the sentence. Thus, the definition should read: "MEP means the technology-based discharge standard for municipal separate storm sewer systems established by CWA Sec. 402(p). MEP is achieved, in part, by selecting and implementing effective structural and nonstructural best management practices based on local conditions. MEP is an iterative standard, which evolves over time as urban runoff management knowledge increases. As such, the operator's MS4 program must continually be assessed and modified to incorporate improved programs, control measures, BMPs, etc."	The language regarding compliance with water quality standards has been retained. The language has been clarified, however, to state that an overall goal of the MEP process is to strive to attain water quality standards. This is consistent with 64 FR 68754 (December 8, 1999).
88	Michael Schaefer (Virginia Municipal Stormwater Association)	"MS4 Program" – The proposed additional language ("to protect water … attendant regulations") adds a new requirement for MS4 Programs above and beyond the already aggressive technology standard of "maximum extent practical" (MEP). While the language is somewhat unclear, it might be mistakenly read as incorporating additional water quality standards requirements beyond the maximum that is practical. VAMSA supports retaining the existing definition and deleting the proposed modification. Please note that the existing definition	The amended language of the General Permit is in accordance with federal requirements and does specify that operators are required to develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable (MEP), to protect water quality, to ensure compliance by the operator with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act and regulations. Much of this language was contained in the existing permit that the new General Permit is replacing. The language also specifies, however, that implementation of best management practices consistent with the provisions of an iterative MS4

		that VAMSA supports conforms exactly to the federal definition of a management program at 40 CFR § 122.26(d)(2)(iv).	Program required pursuant to this section constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable", protects water quality in the absence of a TMDL wasteload allocation, ensures compliance by the operator with water quality standards, and satisfies the appropriate water quality requirements of the Clean Water Act and regulations in the absence of a TMDL WLA.
89	Michael Schaefer (Virginia Municipal Stormwater Association)	"Water Quality Standards" or "WQS" – This proposed definition conflicts with the existing federal definition at 40 CFR § 131.3 and the existing Virginia definition in the EPA-approved Virginia Water Quality Standards Regulation at 9 VAC 25-260-5, which reads: "Water quality standards" means provisions of state or federal law which consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the State Water Control Law (§62. 1-44.2 et seq. of the Code of Virginia) and the federal Clean Water Act (33 USC § 1251 et seq.). Note in particular that a water quality standard includes a water quality criterion or criteria, which may be narrative or numeric, and that the concept of water quality criteria is a completely distinct regulatory concept from that of "numeric limits" – the term used in the proposal's definition of water quality standards. VAMSA strongly recommends using the existing federal and state definition.	The definition of "water quality standards" has been changed to correlate with 9VAC 25-260-5, not 9 VAC 25-720-10, as this definition is more appropriate to MS4 permitting. The definition now reads, "Water quality standards" or "WQS" means provisions of state or federal law which consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for such waters based on such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia) and the federal Clean Water Act (33 USC § 1251 et seq.).
90	Michael Schaefer (Virginia Municipal Stormwater Association)	<u>Section 1240: General Permit</u> Section I.A. – After "lasting until the permit's expiration date" VAMSA recommends inserting "or, for an administratively continued permit, until reissuance of that permit." This is simply for clarity for the transitional period from one permit cycle to the next (i.e., for certainty regarding the continuity of permit coverage and discharge authorization during the general permit regulation and permit coverage reissuance process).	The language of Section I (A) has been amended to specify that the discharge is authorized "until the expiration and reissuance of this permit." It is believed that this would cover any period of administrative continuance.
91	Michael Schaefer	<u>Section 1240: General Permit</u>	The goal of an MS4 Program is the reduction of pollutants "to the Maximum Extent Practicable." MEP is

	(Virginia Municipal Stormwater Association)	Section I.B. – In this subsection and throughout the proposal the absolute term "ensure" or "assure" is used, where consistent with the governing concept of MEP the context more appropriately calls for the required action "to address" the subject matter. For example, in B.1. and B.2. the recommended language is "to address MS4 Program consistency" and in B.2.c. the recommended language is "to address consistency with the TMDL."	an effluent limitation for MS4s, and describes the cumulative effect of a total MS4 Program. To interpret MEP as allowing each individual element of the MS4 Program to be implemented "to the Maximum Extent Practicable" is an incorrect interpretation of the application of this effluent limitation. In cases where the term "ensure" is used in the General Permit, it is expected that performing the action specified is a component of a program that meets the "Maximum Extent Practicable" standard. In meeting the MEP effluent limitation, certain actions must be achieved. For example, MS4 operators must ensure that Erosion and Sediment Control plan reviewers become certified. The use of the term "ensure" is thus believed appropriate.
92	Michael Schaefer (Virginia Municipal Stormwater Association)	<u>Section 1240: General Permit</u> Section I.B. For clarity and consistency with the primary elements of the MS4 Program, VAMSA recommends replacing Section I.B.2.c. with the following: "The operator shall develop a schedule to update its minimum control measures to address consistency with the TMDL."	The language of Section I (B)(2)(c) has been amended to specify that the list of items included is illustrative, and not mandatory or exhaustive, of the items to be considered for updating. It is believed that this accomplishes the goal of the comment.
93	Michael Schaefer (Virginia Municipal Stormwater Association)	More generally, and more importantly, while VAMSA strongly supports the goal of water quality improvement, VAMSA is concerned about over-emphasis in the proposal on TMDLs and the many resource-intensive activities that are triggered in response to TMDLs for specific areas with the MS4 service area. VAMSA is concerned, and we assume the Department is aware, that given the fiscal realities of finite resources this TMDL emphasis will come at the expense of other aspects of local program development. Accordingly, VAMSA recommends that the final regulation be more consistent with existing federal regulations and guidance, which more specifically use the iterative approach of focusing and reassessing BMPs to meet the minimum control measures and leading toward the attainment water quality standards. That approach is more consistent with a manageable process for enhancing MS4 Program capabilities during what is only the second of the three rounds of permits for which EPA guidance stresses the iterative BMP selection process addressing the six minimum control measures.	40 CFR § 130.2(h) stipulates that VSMP [NPDES]-regulated discharges must be addressed by the wasteload allocation component of a TMDL. 40 CFR § 144(d)(1)(vii)(B) requires that permit conditions be consistent with the assumptions and requirements of available TMDLs. Therefore, the General Permit must address the TMDL. As numeric effluent limits are not the most appropriate manner to address stormwater discharges, EPA recommends that regulated MS4 water quality effluent limits will be in the form of BMPs. The Code of Federal Regulations and the Virginia Stormwater Management Regulations recognize the necessity for the General Permit to address TMDLs. Specifically, 40 CFR 122.34(e)(2) and 4VAC50-60-400(D)(2)(f)(5)(b) recognize that EPA and the Board strongly recommend that until the evaluation of the storm water program in 40 CFR 122.37 (December 10, 2012), no additional requirements beyond the minimum control measures be imposed on regulated small MS4s without the agreement of the operator of the affected small MS4, <u>except where an approved TMDL or equivalent analysis provides adequate information to develop more specific measures to protect water quality</u>.

94	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section I.B.5. – Similar to the TMDL provisions that are applicable to TMDLs that are in existence at the time permit coverage is issued, item 5 regarding TMDL Implementation Plans should relate only to TMDL Implementation Plans that are in existence at the time permit coverage is issued. "Shall incorporate" should be changed "shall address." Finally, the whole concept of TMDL Implementation Plan-specified BMPs must be linked to and qualified by the overarching regulatory standard of MEP (after "their MS4 Program Plan" insert "to the maximum extent practical."	Section I (B)(4) (formerly (B)(5)) encourages operators to participate in the TMDL Implementation Plan development process. It is believed to be appropriate to retain this encouragement. Flexibility has been added to Section I (B)(4) (formerly (B)(5)) to allow for the selection of BMPs of equivalent design and efficiency to those identified in a TMDL implementation plan. The goal of an MS4 Program is the reduction of pollutants "to the Maximum Extent Practicable." MEP is an effluent limitation for MS4s, and describes the cumulative effect of a total MS4 Program. To interpret MEP as allowing each individual element of the MS4 Program to be implemented "to the Maximum Extent Practicable" is an incorrect interpretation of the application of this effluent limitation.
95	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section I.B.6. Outfall Reconnaissance Procedures – This section requires the development and implementation of reconnaissance procedures. VAMSA has concerns regarding the phrase "to eliminate the discharge." First, this phrase is confusing and out of place in a provision that addresses procedures for reconnaissance, not the actions that might follow the identification. Second, a binding, blanket regulatory requirement to "eliminate" irrespective of the technical and financial feasibility of elimination is inappropriate. Third, there are circumstances where elimination would not be pursued by the MS4 operation such as when the source is a facility permitted and allowed by DEQ to discharge where elimination is not practical. For these reasons, VAMSA recommends deleting the phrase "to eliminate the discharge." If this phrase remains in this reconnaissance section, that standard contained therein should be "minimize" (as stated in I.B.7.) rather than "eliminate."	The language of Section I(B)(5) (formerly (B)(6)) has been amended to "to identify potential sources…" instead of "to eliminate."
96	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section I.B.7. Monitoring – This section requires an excessive amount of monitoring and related expense. At a minimum, VAMSA recommends this section be revised to provide that	Section I(B)(6) (formerly (7)) requires only that two samples be taken as a part of the site review (in other words, two total samples must be taken per facility where potential discharges of the pollutant exist). This has been clarified in the language of the General Permit and it is believed that this addresses much of the concern of the comment.

		sampling and monitoring be performed only if the source in question cannot be eliminated.	
97	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section I.B.10.a. – The reference to consistency of the discharge "with the WLA" should be changed to "with the assumptions and requirements of the WLA." This language is taken from the federal NPDES permit regulations at 40 CFR § 122.44(d)(vii)(B). This recommended language is helpful because it is broader than the WLA itself and thus incorporates other relevant aspects of a TMDL, such as approved implementation approaches contained in the TMDL itself. For example, the recently approved PCB TMDL for the Lower Potomac River includes additional provisions relevant to implementation beyond the WLA, and which are necessary to understand the intended use and the means of compliance with the WLA.	The language of Section I(B)(9)(a) (formerly (10)(a)) has been amended to "with the assumptions of the TMDL WLA" in order to address the comment and maintain consistency with other sections of the General Permit.
98	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section II.B.1. – All of the goals listed under B.1. (such as knowledge of individuals) are items that VAMSA members and other MS4 operators can work to "promote" but, because they depend on the actions of third parties (individuals, businesses, the public, etc.), they are not items that operators can commit "to meet." Therefore, "to meet" should be changed to "to promote."	The requirements of section II(B)(1), as written, define the measurable goals for a public education program. The program should be implemented with these measurable goals in mind. These measurable goals do not weaken the flexibility available to operators in designing and implementing a program; however, adding the language suggested by the comment would weaken the requirements of this section. The suggested amendments have not been made.
99	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section II.B.1. In d, for "increased range of diverse strategies," "increased range of" should be deleted because effectiveness should be the measure of performance as opposed to an increased range for its own sake.	The requested amendment has been made.
100	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section II.B.1. In e, the goal should be stated as "Effective outreach taking into consideration the needs of various, diverse audiences." Also in e, while VAMSA supports effective outreach to all audiences, the phrase "to address viewpoints and concerns"	Effective outreach should be tailored to the needs of particular target audiences. It is not believed that the language, as it is contained in the General Permit, requires that the MS4 operator reach a specific response action. The original language has been retained.

		should be deleted because this section deals with public education and outreach and is not intended to deal with or reach specific response actions. The phrase in question mixes those two distinct concepts in a manner that is beyond the proper scope of this minimum control measure.	
101	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section II.B.4(a)(1) This is another example of where it is inappropriate to require the operator "to ensure" because the operator cannot guarantee that third parties will comply with local ordinances. As drafted, the operator would be in noncompliance with the general permit if a developer fails to comply with the operator's (i.e., the locality's) erosion and sediment control ordinance. Localities can promote compliance by third parties and enforce ordinances, but cannot ensure compliance any more than, say, the Virginia State Police can ensure that no drivers exceed the posted speed limits on state highways.	The term "ensure," as it is used in Section II(B)(4)(a)(1), comes directly from 40 CFR 122.34(b)(4)(ii)(A). It also refers to the necessity for an operator to possess sanctions to ensure compliance with the Erosion and Sediment Control Law and Regulations, not that the operator would be in noncompliance with its MS4 permit each time that a construction site operator violated the operator's Erosion and Sediment Control ordinance.
102	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section II.B.5(b)(4) – It is inappropriate to require the operator to "ensure" adequate O&M of stormwater management in new development or redevelopment because the operator cannot control the acts or omissions of third parties. VAMSA recommends changing "ensure" to "require." Also, in the last sentence of this section the phrase "by the operator" is redundant and may be misread to imply that the operator is obligated to perform the maintenance obligations of third parties. "By the operator" should be deleted to clarify that the MS4 operator's obligation is to enforce stormwater requirements and require compliance, but to transfer the responsibilities of third parties to localities as a permit requirement potentially subjecting the MS4 operator to enforcement.	The term "ensure" has been changed to "require" as requested by the comment. The second part of (b)(4) is intended to relate that MS4 operators shall require that maintenance agreements provide the operators with the authority to take enforcement action and/or perform the necessary maintenance when a stormwater management facility is neglected. 4VAC50-60-150 currently gives stormwater local programs the authority to perform necessary work to neglected stormwater management facilities. This authority is being further refined by the Technical Advisory Committee that is assisting with a separate regulatory action to amend Parts II and III of the VSMP Regulations.
103	Michael Schaefer (Virginia Municipal	Section 1240: General Permit Section II.B.5(b)(5) – The requirement to conduct site inspections is a	4VAC50-60-150(E) requires periodic inspections of all stormwater management facilities. This includes facilities upon which construction has been completed. Localities shall either provide for inspections on an

	Stormwater Association)	construction concept, not post-construction, and therefore should be moved to II.B.4. Also, this inspection requirement is redundant of II.B.5(b)(4), which covers inspections, and should be deleted for this reason as well.	annual basis or in accordance with an Alternative Inspection Program which ensures that the facilities are functioning as needed. These requirements may be further evaluated and refined by the Technical Advisory Committee in a separate regulatory action underway to revise Parts II and III of the VSMP Regulations. Subsection (B)(5) is not redundant of (B)(4), as (B)(4) contains requirements related to inspections by the owners of stormwater management facilities, and (B)(5) requires inspections by MS4 operators.
104	Michael Schaefer (Virginia Municipal Stormwater Association)	Section 1240: General Permit Section II.E.2(j) – This section pertains to data tracked under Section II B 5 b (6) and (7). VAMSA is concerned about the requirement that this submittal be "in a database format prescribed by the department." VAMSA understands this may relate to pending or incomplete state database development efforts and is concerned about the ability to comply. VAMSA recommends either identifying the format at this time so that the operator may begin compliance efforts or deleting the phrase regarding the currently unidentified format.	The current language of the permit clearly identifies what information is required to be reported. At this time, no set format is required. The Department intends to develop a database/reporting system for use by MS4 operators. Until such a system is developed, it is preferred that reporting be achieved electronically, in Microsoft Word, Excel, or ASCII text delimited.
105	William D. Hicks (Northern Virginia Regional Commission)	There are many instances throughout the regulations where jurisdictions are required to "ensure" compliance with the regulations. We object to the use of the word "ensure" in regulations focused on meeting its objectives to the maximum extent practicable. We suggest changing the text to reflect maximum extent practicable standard.	In cases where the term "ensure" is used in the General Permit, it is expected that performing the action specified is a component of a program that meets the "Maximum Extent Practicable" standard. In meeting the MEP effluent limitation, certain actions must be achieved. For example, MS4 operators must ensure that Erosion and Sediment Control plan reviewers become certified.
106	William D. Hicks (Northern Virginia Regional Commission)	4VAC50-60 Section 1 Part B. Special Conditions. Where the regulations describe MS4 operator obligations in relation to a State Water Control Board-approved total maximum daily load (TMDL), the regulation does not reference the maximum extent practicable (MEP) standard required by the other portions of the regulations. We believe this to be an oversight and should be addressed by modifying 4VAC50-60 §1 B. to read: *...The pollutant identified in a waste load allocation as of the effective* date of the *permit must* be addressed **to the**	Maximum extent practical is the technology based effluent limit in MS4 permits. The permit requires that the operator of a regulated small MS4 must develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable (MEP), to ensure compliance by the operator with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act and regulations. When a TMDL wasteload is allocated to a permitted discharge, it has been determined that the technology based effluent limits are insufficient to protect water quality and additional conditions are necessary. DCR is required by federal regulation to incorporate the most conservative and protective standards. As such, MEP is not an applicable standard for the discharge of any pollutant identified in a TMDL WLA.

		maximum extent practicable *through the* measurable goals of the *MS4* Program Plan...	
107	William D. Hicks (Northern Virginia Regional Commission)	4VAC50-60 Section II B. 1. e. Improved outreach program to address viewpoints and concerns *of target* audiences, particularly *minority* and disadvantaged audiences as well as special concerns relating to children; and While the effectiveness of messages directed to minorities or disadvantaged audiences (e.g. hearing impaired) is affected by the language that the message is conveyed, or the medium by which the message is delivered, it is unclear why stormwater management messages directed to children require "special concern." Without further explanation we suggest that this section be modified to state: e. Improved outreach program to address viewpoints and concerns of *target audiences with particular focus on minorities, disadvantaged* audiences and minors.	The language cited by the comment has been amended to read, "with a recommended focus on minorities, disadvantaged audiences and minors."
108	William D. Hicks (Northern Virginia Regional Commission)	4VAC50-60 Section II B. 3. a. Develop, *implement and* enforce a program to detect and eliminate *illicit* discharges, as defined at 4VAC50-60-*10,* into *the* regulated *small MS4.* While MS4 operators will make great efforts to detect and address illicit discharges it is not expected that such efforts can ensure the "elimination" of those discharges. As such we request that the language be changed to read as follows: a. Develop, implement and enforce a program to detect and reduce illicit discharges to the maximum extent practicable, as defined at 4VAC50-60-10, into the regulated small MS4.	40 CFR 122.34(b)(3) requires that operators of MS4s develop, implement, and enforce a program to detect and eliminate illicit discharges. The Board does not have the authority to relax this requirement.
109	William D. Hicks (Northern Virginia Regional Commission)	4VAC50-60 Section II B. 5. Post-construction stormwater management in new development and redevelopment. This section requires localities to provide significant information regarding "stormwater	The current language of the permit clearly identifies what information is required to be reported. At this time, no set format is required. The Department intends to develop a database/reporting system for use by MS4 operators. Until such a system is developed, it is preferred that reporting be achieved electronically, in Microsoft Word, Excel, or ASCII text delimited.

		management facilities." The Northern Virginia localities request that VADCR provides a standardized format for reporting this and other data required by the proposed regulations.	
110	Darryl Cook (James City County)	The revised regulations represent a major increase in work effort for the program. It needs to be remembered that small localities generally do not have staff or funds dedicated to the stormwater effort. The program as presented here could result in a major enforcement effort for DCR as even the larger small communities will need to increase staff and other resources, which will take time to get approved through their budget processes.	While it is recognized that proper implementation of an MS4 program in compliance with federal law and regulations will require resources and staff time, the General Permit has been drafted to allow for program improvement while attempting to keep the expenditure of resources as low as possible.
111	Darryl Cook (James City County)	As the regulations represent an increase in work effort over the program developed during the first permit cycle, there needs to be time provided for the localities to not only update their MS4 program (as provided for in the 180 day period following the effective date of the permit) but for accomplishment of the actual work elements. It is unclear that this time period for development of the actual program elements is provided for in the proposed regulations.	4VAC50-60-1240, Section II(A) provides that MS4 operators are to submit a schedule to develop and implement programs to meet the conditions of the General Permit. This allows operators to specify the amount of time that they believe is necessary to accomplish needed work elements.
112	Darryl Cook (James City County)	There are many items in the Section 1240, Section II - B, Minimum Control Measures that should be removed and put into a guidance document rather than in regulations. Statements referencing guidance documents such as lines 1093, 1183, 1226, and 1411 that use wording such as "may" or "recommend" are better suited to be in a guidance document that can be updated more readily and easily than regulations.	The references contained in the General Permit have been placed there in order to provide easy access to operators. When such references are “recommended,” their use is not mandatory and it does not harm the General Permit to have them included in the language. The Department will provide updates to MS4 operators in the future should these references change.
113	Darryl Cook (James City County)	Integration of the TMDL requirements into the permit is difficult to understand and will be difficult to implement. As I read the regulations, if a TMDL for a given watershed is approved before the effective date of the permit, then the operator will have 18 months to ensure that the MS4 Program Plan in updated to be consistent with the TMDL. This then creates two possible resubmissions of an MS4 Program Plan; one 180 days after the effective date of the permit to include any new requirements of the revised regulations	While the permit does require more than one modification of the MS4 Program Plan for certain operators, the update required for a TMDL requires only that modifications related to the applicable TMDL be made, and does not require a full update of the Plan. It is expected that MS4 operators will have adequate legal authority to perform the updates necessary to implement a program that addresses a TMDL. Operators are not expected to take actions that they lack the legal authority to perform.

		and another one 18 months after the effective date of the permit to address any TMDLs approved by the date of the permit. A question here is will the Phase II communities have the enabling legislation/authority to implement the procedures and strategies to address any MS4 Program weaknesses (line 1074)? Virginia is a Dillon rule state and most Phase II localities are counties with more restrictive charters than cities and it would be a difficult situation for counties to be in, with a permit requirement that they might have limited authority to address.	
114	Darryl Cook (James City County)	Land disturbing activity needs to be defined consistent with the state's erosion and sediment control act. (Line 185)	The definition for "land disturbing activity" contained in the Regulations is taken from the Virginia Stormwater Law (§10.1-603.1 et seq.) and altering that definition would require a statutory change.
115	Darryl Cook (James City County)	There needs to be a definition of low impact development as LID is encouraged and implementation tracked (see lines 1360 and 1388). This is a very broad concept and means different things to different people, therefore, this concept needs to be more defined to make it meaningful to track and report on annually.	The formal definition of Low Impact Development (LID) is being developed through a separate regulatory action. DCR believes that it is not appropriate to include a formal definition of LID at this juncture. Therefore, the term "low impact development" has been removed from the General Permit and replaced with "structural and non-structural design techniques to create a design that has the goal of maintaining or replicating functionally equivalent to the pre-development hydrologic regime." This introduces the concept of low impact development in a manner that provides clarity and flexibility in definition for the operators to incorporate into their programs.
116	Darryl Cook (James City County)	The definition of "Maximum extent practicable" is going to be a difficult definition to enforce. It is a very subjective standard as it depends on someone's interpretation of which BMPs are technically feasible and at what point costs become unreasonable and prohibitive. These concepts need to be better defined either here or in the other stormwater regulations in order to avoid wide variations of application of this standard around the state.	"Maximum extent practicable", which is an iterative process of implementing, evaluating, and improving BMPs, is an effluent limitation for MS4s set forth by section 402 of the Clean Water Act. Neither the Act nor the Code of Federal Regulations, however, define this term. The definition contained in the regulations is intended to provide some guidance to MS4 operators while still maintaining flexibility. References to "unreasonable and prohibitive" costs have been removed from this definition. By implementing the MS4 program plan consistent with the permit and evaluating and refining BMPs, operators achieve compliance with the MEP standard.
117	Darryl Cook (James City County)	Section 1210 - line 822, Section 1240 - line 998, and Section II E2- line 1480. Start date of permit and reporting is to be on July 1. This is a good change to have the activities and reporting done on a fiscal year basis. That works well with other reporting systems and program	The permit date of July 1 was selected as a date that would fit well with most permittees.

		activities as the localities already operate on that fiscal year basis.	
118	Darryl Cook (James City County)	Section 1220 - line 862 and following requires submitting written explanations for circumstances that prevented permit compliance. It is unclear to what this is referring. It is under the general subparagraph dealing with acceptable nonstormwater discharges but this paragraph seems to be referring to a more general situation where permit compliance cannot be met. Please clarify what this paragraph is requiring.	Subdivision (4) of 4VAC50-60-1220(C) refers to discharges that come as a result of emergency situations (i.e., motor vehicle accidents, weather, etc.) and is necessary to prevent loss of life, injury or severe property damage. The section outlines the types of situations that may occur that would constitute noncompliance with the permit. Such explanations are required to be submitted with the operator's annual report for consideration by the department and the Board.
119	Darryl Cook (James City County)	Section 1240 - Section I 1 - line 1054 and following. What process is to be followed to update the MS4 Program Plan to address any deficiencies caused by the TMDL? Will this be handled in the annual report or a separate schedule?	MS4 operators are expected to review their programs for deficiencies in addressing TMDL WLAs each year and include updates in their annual report.
120	Darryl Cook (James City County)	Section 1240 - Section I 7a - line 1105. Is the monitoring of outfalls a requirement for every year of the permit or just once during the permit cycle? It implies that the sampling is for one year within the 5-year permit cycle but it is unclear.	Section I (6)(a) (formerly (7)(a) requires that two samples be taken once during the 5-year permit cycle. The language of this section has been amended to aid in clarification.
121	Darryl Cook (James City County)	Section 1240 - item 8 - line 1125. How will the annual characterization be performed? If it is only required to perform monitoring for one year during the permit cycle, the estimate will be based on the same criteria each year, land use and precipitation. This will not be reflective of efforts taken to control the pollutant. This could be a major work effort without much positive benefit or at least without much basis in reality. It will be a very gross estimate and the variation will only be as a result of changes in precipitation, not control measures.	The operator is expected to make a characterization of the discharge of the pollutant of concern on an annual basis. This characterization is expected to include a characterization of the discharge from all MS4 outfalls, which is distinct from the separate requirement for sampling on operator-owned facilities. The permit allows for flexible implementation of this process through additional monitoring models or other methods. In making this characterization, the operator should take into account land use, BMPs utilized and installed, any known pollutant removals, rainfall data, and any other applicable factors. It is recognized that this characterization may be fairly rudimentary in nature because of data limitations and variability in the system.
122	Darryl Cook (James City County)	Section 1240 - Section II - line 1171. It is unclear what the purpose of receiving public comments is given that there is not time to address the comments prior to submission. The public is likely to not be well informed on the program requirements or the locality resources available to meet those requirements. It might be more	The public comment period required to be held on the program plan is a method of implementing EPA's April 16, 2004 memorandum entitled, "Implementing the Partial Remand of the Stormwater Phase II Regulations Regarding Notices of Intent & NPDES General Permitting for Phase II MS4s," which explains public notice requirements that have been clarified as a result of Environmental Defense Center, et al. v. EPA, No. 70014 & consolidated cases (9th Cir., Sept. 15, 2003).

		useful to have a citizens group established that can be informed about the program requirements and help the locality establish priorities for implementation. This should be an optional method to satisfy the public comment requirement. The requirement for a 30-day public comment period also reduces the 180-day timeframe to develop the revised permit application to at most 150 days.	The time periods specified in Section II (A) have been removed. Requirements for public noticing of the MS4 Program Plan and modifications have been relocated to minimum control measure 2, public involvement and participation, located in Section II (B)(2). While public notice and opportunities for public comment are required, no particular method or time frame is required so long as any method employed is reasonably calculated to give notice to the affected public. Copies of all written comments received are required to be submitted with the operator's annual report as specified in Section II (E).
123	Darryl Cook (James City County)	Section 1240 - Section II, items B1a, b, c, d - lines 1190, 1193,1196, & 1200. The requirement is to have increased involvement and knowledge of water quality initiatives. This should be reworded as increased indicates that there is some benchmark out there to be exceeded but there is probably little data on current involvement.	It is expected that as a part of the development of the Program Plan, including the elements cited by the comment, operators will assess current progress on the required items in order to establish "benchmarks" to which future progress can be compared.
124	Darryl Cook (James City County)	Section 1240 - item 3b - line 1232. The change from all major outfalls to all known outfalls is a significant change to the program. There needs to be some discussion of how much time will be allowed for accomplishment of this goal such as by the end of the permit cycle. Also, is there a minimum size outfall intended here? There could be some very small systems required without a lower cutoff size. I would recommend at least a 15 inch pipe size.	40 CFR 122.34(b)(3)(ii)(A) requires that a small MS4 must "develop, if not already completed, a storm sewer system map showing the location of all outfalls. . . " State regulations and associated permits are required to be, at a minimum, as stringent as federal regulation. The proposed permit change to require mapping of all "outfalls" corrects a deficiency in the initial MS4 General Permit. There is no minimum size defined in the federal regulations. The permit requirement states, "Develop, if not already completed, and maintain, an updated ~~a~~ storm sewer system map, showing the location of all known outfalls of the regulated small MS4 including those physically interconnected to a regulated MS4, the associated surface waters and HUCs, and the names locations of all impaired surface waters that receive discharges from those outfalls." There is no definitive timeline for completion of mapping of all outfalls. DCR expects operators to continue to progress in locating all outfalls.
125	Darryl Cook (James City County)	Section 1240 - Sections II B 5b(1)&(2) require the development of strategies to minimize water quality and quantity impacts from development activities. James City County has a locally developed program that is different from the standard technology-based program developed by DCR. Whether it is in these regulations or the parts of the regulation currently being developed by a different TAC, there needs to be flexibility for local	The Virginia Erosion and Sediment Control Regulations and the Virginia Stormwater Management Program regulations both provide authority for local governments to adopt criteria more stringent than the State requirements. As such, the flexibility exists.

		stormwater program criteria that meet or exceed the state's requirements.	
126	Darryl Cook (James City County)	Section 1240 - Section II E 2j - line 1502. The tracking of all known BMPs in a database format developed by the Department will be a major work effort even for localities such as ours that already have this information in a database. The entering of data on about 500 BMP facilities, as James City County has, into a database with the required information will take considerable time and research.	The tracking of all permanent BMPs for MS4s that discharge to the Chesapeake Bay watershed was a requirement of the previous MS4 General Permit. Operators located in the watershed that held coverage under the previous General Permit should currently have this information compiled. The Department is committed to working with operators in the development of the database and with enabling the conversion of data into that database to be achieved with as little difficulty as possible.
127	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	The proposed MS4 permit does not do enough to require and assure that stormwater discharges not cause or contribute to exceedances of water quality standards as required by Section 301(b)(1)(C) of the Clean Water Act ("CWA") and implementing regulations. This is particularly true for discharges into impaired waters that do not yet have an applicable TMDL.	MS4 operators are required to design and implement an MS4 program that will reduce pollutants to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. In response to comments received on the proposed general permit, language has been added to clarify that implementation of this program provides for reasonable further progress toward attainment of applicable water quality standards, which is consistent with the position expressed by EPA in 64 FR 68731 (December 8, 1999). See also Notes #1 and #2 below.
128	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	64 Fed. Reg. 68722, 68790 (1999). The prohibition against permitting discharges which contribute to water quality standards violations is not limited to situations where TMDLs have been approved. *See,* 40 C.F.R. § 122.4(d); Arkansas v. Oklahoma, 503 U.S. 91, 105 (1992); In Re Government of the District of Columbia Municipal Separate Storm Sewer System, NPDES Appeal Nos. 00-14&01-09, 335 (2002). The draft permit currently includes no language implementing these requirements.	The language of the amended General Permit requires that the operator's MS4 Program be designed and implemented to ensure compliance by the operator with water quality standards. Implementation of the program is compliance by the operator. This is believed to comply with the requirements of the cited cases as they apply to Phase II MS4s.
129	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	The lack of mandated compliance with water quality standards and a supporting administrative record demonstrating compliance is contrary to 40 C.F.R. § 122.4(d). In In Re Government of the District of Columbia Municipal Separate Storm Sewer System, the Environmental Appeals Board (EAB) remanded an MS4 permit for Washington, D.C. because the EPA had not demonstrated that the permit's BMPs would be sufficient to ensure compliance with applicable water quality standards. The EAB held	The iterative process set out by the General Permit meets federal requirements. The federal law and regulations dictate that an MS4's program plan will be administered through an iterative BMP process that is employed by an MS4 Program Plan that requires evaluation and refinement of BMPs to reduce all pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. It may take a several years or permit cycles to refine BMPs or to select the most appropriate BMPs to achieve the goals of the permit. It should be noted that the efficiencies of certain BMPs improve over time as the MS4 Program matures and time must be given for the

		that a MS4 permit must ensure compliance with water quality standards and that EPA could not issue the D.C. permit because "we find nothing in the record, apart from District's section 401 certification, that supports the conclusion that the Permit would, in fact, achieve water quality standards."	actual BMPs to be evaluated.
130	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	One approach, already used in other stormwater permits in Virginia, would be for the language of the permit to prohibit discharges that contribute to violations of water quality standards and demand individual review of the discharges that potentially violate water quality standards and a greater effort from the permit holder. Without such language, in the event DCR, DEQ, or the MS4 operator learns that a discharge is contributing to a WQS violation, the MS4 operator will have no obligations to improve its program.	The General Permit does address potential violations of water quality standards in its design process. The iterative BMP process that is employed by an MS4 Program Plan requires evaluation and refinement of BMPs to reduce all pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Section I of the General Permit additionally contains requirements for situations where a TMDL WLA has been assigned. MS4 operators are additionally required to consider impaired waters in putting together their plan. All of these requirements must be considered by MS4 operators seeking coverage under the General Permit.
131	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	Possible language to ensure such compliance could easily be borrowed from other Virginia stormwater regulations. For instance, 4 VAC 50-60-430, requires Virginia Stormwater Management Program permits to contain limitations which "must control all pollutants... which ...may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any Virginia water quality standard, including Virginia narrative criteria for water quality." Similarly, the general permit for stormwater discharges from construction sites, 4 VAC 50-60-1170, § I(H), states that "[i]f there is evidence indicating that the stormwater discharges authorized by this permit are causing, have the reasonable potential to cause, or are contributing to an excursion above an applicable water quality standard, or are causing downstream pollution," the permittee is subject to enforcement action or must obtain an individual permit. In particular, the language requiring an individual permit if discharges "are causing, have the reasonable potential to cause, or are contributing" to water quality standards violations would require DCR and the MS4 to work together to develop an individual permit that would include BMPs and other	The language of the amended General Permit requires that the operator's MS4 Program be designed and implemented to ensure compliance by the operator with water quality standards. Implementation of the program is compliance by the operator. This is believed to comply with the requirements of the cited cases as they apply to Phase II MS4s.

		measures sufficient to eliminate the MS4's contribution to the violation.	
132	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	At a minimum, Virginia should adopt an approach similar to that taken by the state of Washington to avoid the violation of water quality standards when a TMDL has not yet been established. The small MS4 permit could do this by first stating that a violation of water quality standards is prohibited. Second, the permit should require those MS4s that are discharging into a water impaired under the bacterial or general benthic standards, or the immediate tributary of such an impaired water, to monitor their effluent and the receiving waterbody. If the results of the monitoring indicate that the MS4 is causing or contributing to the impairment, the MS4 should be required to notify DCR of this fact. This notification should then trigger the same sort of adaptive management that the proposed permit currently requires in the event that a TMDL is issued. For instance, the MS4 should be required to update its MS4 Program Plan and BMPs and continue monitoring to assess whether the effluent is still contributing to the water quality standards violation. The goal of any remedial measures would be to bring the MS4 into compliance with water quality standards.	See Note #2 below.
133	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	A potentially better approach would be for MS4s discharging into impaired waters to be subject to numeric effluent limits that are consistent with water quality standards. This would provide more certainty to permit holders and allow limits to be tailored to ensure preservation of existing uses and water quality. Numerical effluent limitations are the most efficient and only assured method of achieving water quality standards. While BMPs are technically 'effluent limits' for the purposes of § 122.44(d), numerical effluent limitations are preferable, as compliance with such a limitation will guarantee that a municipality is meeting their MS4 obligations.	See Notes #1 and #2 below.
134	Leon Szeptycki (University of	In addition to the protection of water quality standards, the use of numerical effluent limitations would give	See Note #1 below.

	Virginia), Devin Huseby (University of Virginia)	municipalities an easily identifiable target by which they can gauge their compliance with the MS4 permit. Without numerical limitations, more work must be done to guarantee that the required BMPs will in fact ensure compliance with water quality standards. The use of numerical effluent limitations would set clear benchmarks for municipalities covered by the permit, making their MS4 programs easier to design, administer, and evaluate.	
135	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	For the same reasons that numerical effluent limitations should be used to ensure compliance with water quality standards, such limitations should be used to implement applicable TMDLs. The proposed permit does contain a procedure, including evaluation and monitoring, to implement applicable WLAs in a TMDL. The permit falls short of making WLAs fully mandatory through a numeric effluent limitation, as would be the case for any other VPDES permit holder. The only way to guarantee that a TMDL will be met is to assign WLAs to municipal stormwater discharges and then to incorporate the WLAs as effluent limitations into the MS4s permit authorization.	See Note #1 below.
136	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	Without numerical effluent limitations, it would be exceedingly difficult to determine whether and how a municipality could meet is numerical obligations under a TMDL. Relying solely on BMPs would require monitoring, studies, and a robust administrative record to demonstrate that the BMPs will result in compliance with the WLA. Although the adaptive management approach in section I(B) of the draft permit is a positive step forward in implementation of TMDLs for MS4s, it will not ensure the compliance with WLAs needed to actually restore impaired waters.	See Note #1 below.
137	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	The draft permit also fails to prohibit new discharges into impaired waters not covered by TMDLs. As populations grow, new MS4s will seek coverage under the permit. In addition, existing MS4s may develop new discharges. Currently, the proposed permit contains no	The Virginia Stormwater Management Regulations, in 4VAC50-60-310(C)(9), prohibit the issuance of a VSMP permit to a “new discharge” unless certain conditions are met. This prohibition/qualification applies to all stormwater discharges and is to be considered in determining whether or not a permit may be issued; it does not need to be included in the language of the General Permit itself.

		language prohibiting such new discharges to impaired waters. However, the Clean Water Act and implementing regulations prohibit any permit that authorizes a new discharge (of the relevant pollutant) into an impaired water. In Friends of Pinto Creek v. U.S. EPA, the court overturned the issuance of an NPDES permit to a mining company, which had planned on discharging copper pollutants into a creek that violated the applicable standard for copper. The U.S. EPA had granted an NPDES permit for the discharge on the condition that the mine operators offset the copper effluents through remediation of copper loading from an upstream inactive mine." The court held that 40 C.F.R. 122.4(i) "is very clear that no permit may be issued to a new discharger if the discharge will contribute to the violation of water quality standards." The court found that the only exception allowed by the regulations is when a TMDL has been issued for the impaired water, there are sufficient existing pollutant load allocations to allow the discharge, and existing dischargers into the impaired water are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.	4VAC50-60-10 and 4VAC50-60-420 define what constitute "new discharges" for purposes of the Regulations.
138	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	The MS4 permit cannot authorize new discharges to impaired waters and this should be made clear on the face of the permit. Any new discharges into impaired waters should be subject to individual permitting or other increased review to ensure that such discharges will not contribute to the impairment.	The Virginia Stormwater Management Regulations, in 4VAC50-60-310(C)(9), prohibit the issuance of a VSMP permit to a "new discharge" unless certain conditions are met. This prohibition/qualification applies to all stormwater discharges and is to be considered in determining whether or not a permit may be issued; it does not need to be included in the language of the General Permit itself.
139	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	The draft permit fails in any way to implement the Commonwealth's Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy, thereby missing a critical opportunity to use the general permit as a means to implement the pollution reductions allocated by the Tributary Strategy to municipal run-off. The general permit should require each MS4 operator to implement its fair share of the urban best management practices and pollution reductions set out in the applicable Tributary Strategy.	The Tributary Strategies do not account for many of the BMPs that are employed by MS4s. The iterative process followed by MS4s does require that BMPs be employed and refined that will result in load reductions. Impaired waters are required to be considered by MS4 operators in developing their MS4 Program Plan (4VAC50-60-1240, Section II). The Tributary Strategies have been implemented in the General Permit where appropriate. The General Permit requires consistency with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Law, both of which are goals of the Tributary Strategies.

			For a response regarding Tributary Strategies generally, see Note #3 below.
140	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	It does not appear that DCR has met its commitment to examine MS4 permits with the respect to the Tributary Strategies and there is no basis for assessing whether the programs required by the draft permit will implement BMPs at the level needed for the State to meet its obligations to restore water quality in the Bay. If those BMPs and related programs continue to be inadequate, the permit establishes no follow-up, mandate, or consequences for improving BMP implementation.	With respect to Tributary Strategies generally, see Note #3 below. The iterative process required by the General Permit (and the federal and state MS4 regulations) requires evaluation and refinement by MS4 operators to determine the suitability and effectiveness of selected BMPs, and the modification and/or substitution of those BMPs where determined necessary and appropriate. The General Permit requires consistency with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Law, both of which are goals of the Tributary Strategies. Non-compliance with the General Permit and its requirements can result in enforcement action.
141	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	Federal guidance suggests that MS4 Permits should be modified where "information indicates that water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program." The impairment of the Bay seems to a situation that would warrant greater attention than usual, and the Tributary Strategies are an ideal vehicle for accomplishing this goal.	See Notes #2 and #3 below.
142	Leon Szeptycki (University of Virginia), Devin Huseby (University of Virginia)	The Tributary Strategy is a TMDL-like program and it should be given effect in the permit similar to actual TMDLs. In order to further Virginia's goals under the Agreement, the State should incorporate the Tributary Strategies directly into the MS4 permit. An efficient way to accomplish this would be to require each municipality to implement a proportionate share of their particular watersheds urban BMPs.	See Note #3 below.
143	Constance Bennett (York County)	I question the definition of “physically interconnected” especially as it applies to Counties. VDOT maintains all roadway drainage systems and they are interconnected to the Counties’ systems throughout. Is that the intent of the definition?	That is the intent of the definition.
144	Constance Bennett (York County)	Under Sec. I B 8 and 10 reference is made to stormwater discharges in gallons. Stormwater is usually measured in cubic feet per second as a flow, is it intended to then convert flow to volume?	The requirement for the estimate of stormwater discharged to be expressed in gallons has been changed to cubic feet.
145	Constance Bennett (York County)	Under Section II A it states that our program plan must have a public comment period prior to submittal.	The public comment period required to be held on the program plan is a method of implementing EPA’s April 16, 2004 memorandum entitled, “Implementing the

		Since the program plan is required by state and federal laws, what is the purpose of public comment on it. We are already required by law to hold public comment for ordinance changes and make the program available for public view. It seems like another unnecessary step to go through.	Partial Remand of the Stormwater Phase II Regulations Regarding Notices of Intent & NPDES General Permitting for Phase II MS4s," which explains public notice requirements that have been clarified as a result of Environmental Defense Center, et al. v. EPA, No. 70014 & consolidated cases (9th Cir., Sept. 15, 2003).
146	Constance Bennett (York County)	Under Section II B 3 reference is made to the EPA guidance manual. Is it appropriate to list this specifically in the regulations. If the document changes, do the regulations need to be changed. Other documents are referenced elsewhere.	The reference cited in the comment and others have been placed within the General Permit in order to increase operator awareness and to allow for easy access. Should these references change, the Department will place updated references in guidance or on its website. As these materials are merely references for the convenience of operators, the regulations would not need to be changed if these documents change.
147	Constance Bennett (York County)	Section II B 3 b. again references physically intereconnected systems for mapping. Does this mean we must include VDOT systems in our mapping? Is DCR going to require them to provide this information to localities? (It seems to say that in g.)	Section II (B)(3)(b) requires operators to develop a map showing all known outfalls, including those owned or operated by the operator that are physically interconnected to another regulated MS4. This would include outfalls that discharge directly into a VDOT system (it should be noted that "outfalls" does not include conveyances that only function to connect two segments of the same surface water; thus, a simple road crossing would not be considered a physically interconnected outfall if there is no discharge to another system). As pointed out by the comment, however, MS4s are required in subsection (g) to notify other MS4s to which they are physically interconnected.
148	Constance Bennett (York County)	I have another concern with regard to the time period expected to implement these changes. It has taken us 5 years to get to this point, with the additions of the TMDL and monitoring requirements, as well as mapping and inspection of all outfalls, it may be unrealistic to expect these in a short period of time. Especially as budgets and programs are planned in jurisdictions.	The timeframes set in the General Permit for actions to be completed are believed to be reasonable and achievable by permittees. The mapping of all outfalls does not have a timeframe associated with it; reasonable progress is expected on achieving this goal except in cases where a TMDL WLA applies. In TMDL situations, outfall reconnaissance is required over a five-year cycle, with annual requirements depending upon the number of outfalls that the MS4 has that discharge to the surface water identified in the WLA. This flexibility is provided as a means to address budget issues experienced by permittees. It is also expected that outfall reconnaissance and mapping can be conducted in a complimentary fashion in many cases.
149	Linda Even	The six Minimum Control Measures (MCMs) in the proposed rule are the same as those in our recently expired permit. However, this proposed rule further dictates ("The operator shall…"), for each MCM, specific actions, not all of which are relevant to all facilities. For example, In MCM3, "The MS4 Program shall effectively	It is understood that not all permit conditions may be applicable to all small MS4s, due to the varying types of small MS4s that exist (i.e., counties, cities, towns, state institutions and agencies). Small MS4s will not be expected to comply with permit conditions that they cannot comply with due to their nature (i.e., a research facility cannot enact a local ordinance, but may accomplish many permit objectives through the adoption of policies and procedures). MS4 operators do have the ability to apply for an individual permit for their discharge if they believe necessary.

		prohibit, through ordinance or other regulatory mechanism, nonstormwater discharges…" Non-municipal systems regulated via this permit do not have regulatory mechanisms at their disposal and could not comply with that and some of the other dictated control measures. 'Shall' statements that have no benefit and/or applicability should be able to be satisfactorily addressed by saying NOT APPLICABLE in the action determination.	
150	Linda Even	The permit is relatively prescriptive in its implementation language, and takes away much of the flexibility in defining BMPs that best suit each facility. Each of the six MCMs has 3 to 9 specific requirements that must be addressed in a draft Plan. It would be preferable, and more reasonable, to allow each MS4 to select a subset of the prescribed actions, or to prescribe only a few essential actions and make the others subject to review and selection.	While the General Permit does strengthen and further define the expectations for an MS4 program, the flexibility of BMP selection by the operator has been retained except where consistency with a state law is required (such as construction site stormwater runoff control, which requires consistency with the Virginia Erosion and Sediment Control Law and Regulations). In the development of an MS4 Program Plan, the operator is permitted to determine the BMPs to be employed to fulfill the requirements of the six minimum control measures.
151	Kristel Riddervold (City of Charlottesville)	Regarding the Definition of "MEP" – In addition to being able to reject BMPs due to their technical infeasibility or being cost prohibitive or unreasonable, they should also be rejected if they are not appropriate.	The definition of "Maximum extent practicable" contained in 4VAC50-60-10 has been amended to specify that, "MEP is achieved, in part, by selecting and implementing effective structural and nonstructural best management practices (BMPs) and rejecting ineffective best management practices (BMPs) and replacing them with effective best management practices (BMPs)." It is believed that this amendment addresses the concern raised by the comment.
152	Kristel Riddervold (City of Charlottesville)	Regarding the definition of "runoff" or "stormwater runoff" – this water should not have to hit a waterway before it is considered either of these terms.	The General Permit regulates discharges to surface waters. Modification of the definitions of "runoff" or "stormwater runoff" is believed to be inappropriate for this regulatory action but will be considered in another ongoing regulatory process to revise Parts II and III (stormwater management technical criteria and local programs).
153	Kristel Riddervold (City of Charlottesville)	Regarding the definition of "stormwater" – see comment above (does it have to reach a waterway to be considered).	See the response to comment 152 above.
154	Kristel Riddervold (City of Charlottesville)	Question the existing definition of "state waters" including water under the ground…does this mean groundwater or water running through a conveyance system.	The term "state waters" is understood to include groundwater, in addition to other waters. It is of note, however, that the usage of the term "state waters" in the General Permit is limited; rather, the term "surface waters" is more generally used.
155	Kristel Riddervold (City of Charlottesville)	Clarification of the term "physically interconnected" is needed. Does this mean hard pipe connection only or does it also include connections via surface waters (flow from a pipe in one	The definition of the term "physically interconnected" contained in 4VAC50-60-10 includes direct discharges from one MS4 to another. An outfall to a stream that later is captured as a part of another MS4 would not be considered a direct discharge, thus the two systems

		MS4, into a stream, back into a pipe in another MS4)	would not be considered to be physically interconnected.
156	Kristel Riddervold (City of Charlottesville)	Section 1220.C.4 - Remove the word "is" in the following phrase "The discharge of materials resulting from a spill is necessary to prevent…."	The word "is" has been retained. Subdivision (C)(4) must be read in relation to the opening paragraph of subsection (C).
157	Kristel Riddervold (City of Charlottesville)	Section I.B – General concern about the impact on limited resources of extensive requirements on the operator when TMDL waste loads are allocated to an MS4, especially related to monitoring (Section I.B.7).	The Board and the Department are aware of the fiscal concerns of MS4 operators, and the General Permit has been drafted to reduce fiscal impacts to the greatest extent possible while still ensuring compliance with the Clean Water Act and the protection of water quality. Examples of this consideration can be found in the monitoring requirements of the General Permit, which generally require evaluation and outfall reconnaissance rather than end-of-pipe effluent monitoring or ambient monitoring.
158	Kristel Riddervold (City of Charlottesville)	Section I.B.5 – the term "shall incorporate applicable BMPs" should be changed to "shall consider incorporation of applicable BMPs"…this would provide the opportunity for the operator to use the MEP process to identify those BMPs that are feasible, cost effective, and appropriate.	Additional flexibility has been built into section I (B)(5), which now includes the statement that "The operator may choose to implement BMPs of equivalent design and efficiency instead of those identified in the TMDL implementation plan, provided that the rationale for any substituted BMP is provided and the substituted BMP is consistent with the TMDL and the WLA."
159	Kristel Riddervold (City of Charlottesville)	Section I.B.6 – The term "eliminate" may be too absolute versus what, by definition, a WLA is. The term "minimize" would be more appropriate.	The requirement for the "elimination" of discharges in Section I (B)(6) has been amended to a requirement for the discharge to be "reduced" in a manner consistent with the TMDL.
160	Kristel Riddervold (City of Charlottesville)	Section II.B.5(b)(4) – In some cases, the phrase "requiring the owner to develop a recorded inspection schedule" may be too prescriptive. Why would this be needed if an operator has an inspection program	Recorded maintenance agreements and inspection schedules are necessary to ensure that owners of individual structural stormwater management facilities retain responsibility for the inspection and maintenance of those facilities following construction. Without such agreements, there is no mechanism by which private owners may be obligated to perform inspections and needed maintenance.
161	Kristel Riddervold (City of Charlottesville)	Section III.J – Question the applicability of the "Notice of planned changes" text to this general permit.	Section III of the General Permit is language that is required to be included in all NPDES (including VSMP) permits. The subsections of Section III (J) that may not be applicable to regulated small MS4s do specify that notice is required only when new or amended standards are applicable to the permit holder.
162	Carmen Pascarosa	The DCR issues stormwater permits, but does not have any input of the clearing of CBPA buffers, which cause a direct increase in stormwater runoff.	Although they are several Acts contained within the Code of Virginia that are overseen by separate, independent Boards, the Department of Conservation and Recreation is responsible for implementation of both the Virginia Stormwater Management Act and the Chesapeake Bay Preservation Act. The Virginia Soil and Water Conservation Board provides oversight on the development and implementation of stormwater management regulations under the Virginia Stormwater Management Act. It does not have authority to implement the Chesapeake Bay Preservation Act, which is overseen by the Chesapeake Bay Local Assistance Board.

163	Thomas Fore	Too little is being done to address stormwater runoff. This is a major source of pollution.	The Department of Conservation and Recreation is committed to protecting the Commonwealth's water resources. This is evident through the proposed issuance of this more refined general permit, the on-going development of more restrictive stormwater management regulations, and the continued consolidation of stormwater programs.
164	Grace Moran	Please ensure that the standards for stormwater treatment exceed those that are currently in place.	The Department believes that the proposed permit better refines the expectations of MS4 programs and requires additional effort where TMDLs have determined that stormwater runoff has impacted water quality.
165	David Harter	Restore plant life and wetlands to watersheds whose shores have been mutilated by industry and other destructive actions.	The purpose behind this permit is to ultimately protect the water quality of our rivers, streams, wetlands and bays. The proposed permit is not a panacea for all water resource issues but addresses the issue of stormwater runoff from municipal separate storm sewers within the context of existing federal and state law.
166	David Harter	Innovate civil engineering projects to include wetlands plants which can clear water of some pollutants before it reaches storm drains.	It is important that the regulated community have flexibility to implement those types of BMPs that are most appropriate to the community in order to meet the conditions of the permit. Innovative civil engineering projects such as discussed are allowable under this permit.
167	David Harter	Help farmers gain knowledge of and access to new agricultural methods which are environmentally safe and do not include algae-encouraging fertilizers.	Agricultural practices are largely exempted from the Clean Water Act. Inclusion of any agricultural requirements is not applicable under this permit. The Department, however, does administer the Commonwealth's Agriculture Cost Share BMP program, which focuses on improving water quality from an agricultural standpoint, and does administer the Commonwealth's Nutrient Management program.
168	Max Stieglitz	Include specific numeric pollution limits. These limits are necessary to ensure that clean up plans are achieved. Establish an overall municipal cap and end-of-pipe water quality standards. Require seasonal monitoring for these limits.	With regard to specific numeric pollution limits, see Note #1 below. The establishment of an overall municipal cap through the General Permit is inappropriate. The General Permit regulates the MS4 system, and not the entire jurisdiction, as the MS4 system may not serve the entire locality. With regard to the monitoring requirements contained in the General Permit, see comment #176 below.
169	Max Stieglitz	Prohibit the installation of any new additional direct (piping) discharge of stormwater to surface water streams, rivers, or the bay.	The purpose of the MS4 General Permit is to regulate the discharge coming from an MS4 system. Limiting the number of discharges is beyond the regulatory authority that guides the development of the language of the General Permit.
170	Max Stieglitz	Identify surface waters and require mandatory riparian buffers with new development and roadways.	The proposed permit is issued under the Clean Water Act, National Pollutant Discharge Elimination System program. The MS4 program regulates pollutant discharges from MS4 systems, and is not a land use or zoning program. While riparian buffers should be considered in the development of any comprehensive

			water quality protection program, their inclusion in a water quality discharge permit is believed to be beyond the authority of the MS4 General Permit.
171	Max Stieglitz	Establish stiff DCR penalties for stormwater violations with higher fines for repeat violators. Require municipal localities to utilize stiff monetary penalties against violators. (currently my county can only fine 100.00/day, that's a joke)	While the Virginia Stormwater Management Act (§10.1-603.1 et seq.) does provide for the development of a schedule of civil penalties by the Virginia Soil and Water Conservation Board, this action is not the appropriate forum for the development of such a schedule. Rather, a schedule of civil penalties is one topic that will be considered in a separate regulatory action by the Board.
172	Christopher Blakeman (City of Roanoke)	We have one water body that has been preliminarily listed for PCBs but has not been determined to be a wasteload issue. Is that something we would see in these regulations?	Permit requirements regarding TMDL WLAs are applicable only to those TMDLs approved by EPA and the State Water Control Board as of the permit's effective date. In order for this draft to cover TMDLs established after the effective date, the permit must be reopened in accordance with the appropriate federal and state regulations.
173	Christopher Blakeman (City of Roanoke)	You have some guidance recommending that we collaborate with DEQ with regard to the development of the implementation plan. Will there be a local or DCR representative involved in that process? How does that affect our stormwater management program?	The Department has TMDL watershed coordinators that participate as shareholders in the development of TMDLs and TMDL Implementation Plans. In some instances, the Department develops TMDL Implementation Plans. All localities are greatly encouraged to participate in development of both the TMDL and the Implementation Plan. The potential impact on a particular stormwater management program is dependent upon various parameters including the impairment, its causes, local government participation in development of the documents and to what extent the stormwater management program has previously addressed its discharge. At a minimum, discharges from the MS4 must meet the conditions listed in the General Permit.
174	See commentor list at end of document	Include specific numeric pollution limits. These limits are necessary to ensure that clean up plans are achieved.	Section 301 of the CWA requires that discharger permits include effluent limitations necessary to meet State or Tribal WQS. Section 502 defines "effluent limitation" to mean any restriction on quantities, rates, and concentrations of constituents discharged from point sources. The CWA does not say that effluent limitations need be numeric. As a result, EPA and States have flexibility in terms of how to express effluent limitations. EPA has, through regulation, interpreted the statute to allow for non-numeric limitations (e.g., "best management practices" or BMPs, see 40 CFR 122.2) to supplement or replace numeric limitations in specific instances that meet the criteria specified at 40 CFR 122.44(k). This regulation essentially codifies a court case addressing stormwater discharges. NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977). In that case, the Court stated that EPA need not establish numeric effluent limitations where such limitations were infeasible.

			For municipal stormwater discharges in particular, the current use of system-wide permits and a variety of jurisdiction-wide BMPs, including educational and programmatic BMPs, does not easily lend itself to the existing methodologies for deriving numeric water quality-based effluent limitations. These methodologies were designed primarily for process wastewater discharges, which occur at predictable rates with predictable pollutant loadings under low flow conditions in receiving waters. Using these methodologies, limitations are typically derived for each specific outfall to be protective of low flows in the receiving water. Because of this, permit writers have not made wide-spread use of the existing methodologies and models for stormwater discharge permits. In addition, wet weather modeling is technically more difficult and expensive than the simple dilution models generally used in the permitting process. Potential problems of incorporating inappropriate numeric water quality-based effluent limitations rather than BMPs in stormwater permits at this time are significant in some cases. Deriving numeric water quality-based effluent limitations for any NPDES permit without an adequate effluent characterization, or an adequate receiving water exposure assessment (which could include the use of dynamic modeling or continuous simulations) may result in the imposition of inappropriate numeric limitations on a discharge. Examples of this include the imposition of numeric water quality criteria as end-of-pipe limitations without properly accounting for the receiving water assimilation of the pollutant or failure to account for a mixing zone (if allowed by applicable State or Tribal WQS). This could lead to overly stringent permit requirements, and excessive and expensive controls on stormwater discharges, not necessary to provide for attainment of WQS. Conversely, an inadequate effluent characterization could lead to water quality-based effluent limitations that are not stringent enough to provide for attainment of WQS. This could result because effluent characterization and exposure assessments for discharges with high variability of pollutant concentrations, loadings, and flow are more difficult than with process wastewater discharges at low flows. For additional discussion, see also Note #1 below.
175	See commentor list at end of document	Localities in the Chesapeake Bay watershed should be required to implement and achieve the Bay clean up plan.	The comment suggests that MS4 permittees be required to achieve the goals of the Tributary Strategies, which are the clean-up plan for Virginia's rivers and the Chesapeake Bay. The Strategies contain within them goals much broader than regulated MS4 discharges, such as goals for agriculture and point sources. The General Permit cannot require the attainment of all of these goals.

			With regard to the inclusion of specific Tributary Strategy goals as "an equivalent analysis" to a Total Maximum Daily Load (TMDL), see note #3 below.
176	See commentor list at end of document	Require those localities that release runoff to "impaired" or dirty waters monitor their runoff to assess their progress.	The General Permit requires monitoring. Monitoring does not always include chemical analysis; as explained by 64 FR 68769 (December 8, 1999), EPA does not anticipate "end of pipe" monitoring requirements for regulated small MS4s. Monitoring required by the General Permit includes outfall reconnaissance procedures when a TMDL wasteload allocation (WLA) has been assigned to the MS4 (4VAC50-60-1240, Section I (B)(5)); evaluation (including sampling) of all properties owned or operated by the MS4 operator for potential sources of pollutants identified in a WLA (4VAC50-60-1240, Section I (B)(6)); evaluation components in the six minimum control measures contained in 4VAC50-60-1240, Section II, including evaluation of public outreach and education BMPs under minimum control measure 1 of 4VAC50-60-1240, Section II, procedures to detect illicit discharges under minimum control measure 3 of 4VAC50-60-1240, Section II, requirements for monitoring compliance under minimum control measures 4 and 5 (construction site stormwater runoff control and post-construction stormwater management in new development and redevelopment), and requirements for evaluation of pollution prevention/good housekeeping BMPs under minimum control measure 6 of 4VAC50-60-1240, Section II; and the annual and permit cycle evaluations required by 4VAC50-60-1240, Section II (E).

Commentors for items numbered 174 through 176:

David Harter	Doug English	Marjorie Streeter	Amelia Morris
Max Stieglitz	Jen Johnson	Gordon T. Winfield Jr.	Susan Pederson
Marcie Tidd	David Alford	Chet Hepburn	Susan Huisman
Paul Toxie	Paul Ward	Paul Greggs	Sarah Purzycki
Jennifer Spaine	Monroe S. Ozment	Harry Byrd	Deborah Meadows
Diana Shores	Nina Michael	B. Manci	Benjamin Thacker-Gwaltney
Jeffrey Geiger	Christina Guthrie	Martin Baskin	
Al Davis	Tom Kennedy	Timothy O'Connell	Kasey Gibson
David Street	Robert Leggett	Joy Davis	Julie Byrne
Terra Pascarosa	William Sphar	Norma Kacen	Hannah Phillips
Alissa D'Auria	Brian Clark	William Coupland	William Reitelbach
David Ward	Stephen Castle	Duncan Macomber	Jeanette Stewart
Emily Francis	David Vespa	Jessie Reese	Anne Little
Stella Jones	Cheron Carlson	Jane Simpson	Victoria Hulick
Katrina Hickman	Janet Paisley	Santina Brown	Margaret Koetsch
Marilyn McGlamary	Leslie David	Andrea Leonard	Brian Wilson
Paul Spiegelblatt	David Shantz	Kristopher Purzycki	Linda Allen Clifton
Lisa Bagby	William V. Brierre	Paige Barlow	Russell Richards
Tamara Friedler	Marilynne Blair	Kristen White	Adelaide McKelway

James Hammond
Sam Moore
Susan Rager
Thomas Russell
Jerry Benson
Jonathan Leibovic
Kirk Barley
Benjamin Kaplan
Mary Blackwell
Thomas Wells
Megan McGavern
Nancy Alexander
Christopher Millard
Dorothy Abbott
Michael Byrnes
Dave Vaughn
Dave Dabay
Shirley Estabrooke
Helen Torosian
Karen Stephens
Ray Porfiri
Fred Bashara
Richard Raimondo
Charles Wells
Cynthia Brown
Karen Allen
David Jackson
Sheila Cox
William Gossman
Marcia Coling
Katherine Bennett
Richelle Brown
Gail Cousin
Jim Traweek
Benjamin Farrell
Michael Hudson
Marcia McKenzie
Derek Corson
Lyle Groshel
Jason Hallacher
George Carneal
Jacqueline Bowman
Bonita De Trinis
Megan Smith
Brenda Erickson
Richard Miller
Todd Cairns
Charles Sydnor
Sara Stewart
Scott Blossom
Edward Paska
Judith Shematek
Zelma S. Taylor
Ron du Bois
Lilli Hoffman
Gregory Noe Fellows

Bethany Cardone
Elizabeth-Reid Becker
Stan Altura
Sharon Burtner
Laurie George
Robert Coggsdale
Rod Hughes
Dennis O'Connell
Gale Bryant
Errol Plata
John Watson-Jones
Timothy Gabbert
Craig Schmidt
Beverley Anne Klein
Patricia McKerns
Denise Roane
John Ragosta
Georgia Weatherhead
Cynthia Torrey
Hagai Nassau
Dana Cook
Ariele Foster
Russell Scott
William Cinnamond
Jesse Lynnae Braxton
Whit Wall, Jr.
Susan Lozinyak
Kathyrn Squires
David Singer
Robert Forster
Jamie Kaufman
Andrea Moran
Ava Butcher
Everett Lovell
D. Richard Felker
Frank Hale
Kyle Metz
Michael Kellam
Sandra Kosch
Elizabeth Snyder
Chris Stafford
Jessica Barker
Larry Uman
Suzanne Wheatley
James Boissonnault
Robin Curtis
John Pickard
Aldona Affleck
Dean Amel
David Smalley
Michael Childs
William Millar
Rob Watt
Carroll Gould
John Surash
Martha Skelley

Katherine S. Fountaine
Anne Ellis
Richard Owens
Jill Hoehlein
Eric Axilbund
Mary Hill
Terry Gooding
Aaron Evans
Anna Hill
Matthew Wold
David Templeton
Janice Levin
Linda Hevener
Allison Knight
Whit Wall
Timothy Edwards
Laura Olson
David Buchanan
Ellen Shuler
Kim Mummert
Robert Mueller
Kristin Carter
Owen Kennedy
Charles Cabell
Ken Gigliello
Frances Morawski
Doug Dreyer
Conrad Sauer
Margaret Van Clief
Jennifer Rimel
Sarah Hassmer
Allison Czapracki
Paul DiMarco
Rebecca Kurylo
Ken Bunch
Ralph M. Hitchcock, Jr.
William Shafroth
Daniel Creedon
Kemper Eagle
Martha Williams
Gail Criger
Patrice Well
Dave Cavanaugh
Rae Lynn Boyer
Douberly
Jon Wilkinson
Roger Hart, Jr.
Kristin Brown
Karin Houston
Allison Kiehl
Dibrel Inge
Brian Gordy
Welford Harris, Jr.
James Taylor
Ellie Hsieh
Rachel Born

Brion Morrison
Ronnie Woody
Christina Ferreri
Sylvia York
Greg Lustig
Dawn Terrell
Courtney Worrall
Allen Witheringtom
Suzanne Tarr
Gerri Linder
Felicia Rakes
Philip Prisco
Effie Fox
Gail Kafka
Joann Marsh
Hank Helmen
Maggy Lewis
Judith Harley
Christine Stapp
Dana Wiggins
Peter Schmidt
Trudi Dixon
Anne Waggoner
Lee Waggoner
Guy & Carlyn St. John
Patricia Newton
Brad Stallings
Thomas Branch
Kristen Hughes
Dianne Hinch
Liz Collins
Linda Shapiro
Cynthia Wackerbarth
William Fraker
Debra Laudermilch
Ted Moline
James Shelton
John Bowman
Jennifer Connors
John Drain
Constance Corbino
Mary Beth Mains
Gretchen Gorecki
Brian Gallagher
Susan Wong
Karen Westermann
Sharon Keys
Milton Schultz
Mark Langley
Kathleen Porter
Karen Julihn
Bethany Cardone

NOTES REFERENCED IN AGENCY RESPONSES TO PUBLIC COMMENTS

NOTE #1

Should the Small MS4 General Permit contain numeric effluent limits?

Several public comments received argued that numeric effluent limits should be included in, and enforceable under, the General Permit. It is argued that including these limits would align the General Permit with other NPDES (VPDES) permits, and bring it into compliance with requirements of state and federal regulations. It is also argued that inclusion of numerical limits in the permit is a more assured method for meeting water quality standards because the efficiency of many BMPs used by MS4s is unproven, that MS4 documentation of individual BMP performance is lacking, and that the presence of a TMDL indicates waters are still in fact impaired.

Response:

Based on the Clean Water Act and its regulations and EPA guidance, the Department believes that numeric effluent limits, whether in a TMDL or non-TMDL situation, are inappropriate for inclusion in the General Permit. Rather, an iterative BMP management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy appropriate water quality requirements of the Clean Water Act is a more appropriate effluent limitation.

The current language of the General Permit specifies that "[i]mplementation of best management practices consistent with the provisions of the MS4 Program required pursuant to this section constitutes compliance with the standard of reducing pollutants to the 'maximum extent practicable', protects water quality in the absence of a TMDL wasteload allocation and provides for reasonable further progress toward attainment of applicable water quality standards," and requires a heightened BMP implementation scheme when a TMDL wasteload has been allocated to an MS4. The following sources support the Department's position:

- The Clean Water Act does not require numeric effluent limitations.
  Section 301 of the CWA requires that discharger permits include effluent limitations necessary to meet State or Tribal WQS. Section 502 defines "effluent limitation" to mean any restriction on quantities, rates, and concentrations of constituents discharged from point sources. The CWA does not say that effluent limitations need be numeric. As a result, EPA and States have flexibility in terms of how to express effluent limitations.
  EPA Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits (issued August 1, 1996 and published at 61 FR 43761 (November 26, 1996).

- …narrative effluent limitations requiring implementation of best management practices (BMPs) are generally the most appropriate form of effluent limitations when designed to satisfy technology requirements (including reductions of pollutants to the maximum extent practicable) and to protect water quality. *40 CFR 122.34(a).*

- EPA has, through regulation, interpreted the statute to allow for non-numeric limitations (e.g., "best management practices" or BMPs, see 40 CFR 122.2) to supplement or replace numeric limitations in specific instances that meet the criteria specified at 40 CFR 122.44(k). This regulation essentially codifies a court case addressing stormwater discharges. NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977). In that case, the Court stated that EPA need not establish numeric effluent limitations where such limitations were infeasible.

- Regardless of the basis for the development of the effluent limitations (whether designed to implement the six minimum measures or more stringent or prescriptive limitations to protect water quality), EPA considers narrative effluent limitations requiring implementation of BMPs to be the most appropriate form of effluent limitations for MS4s. CWA section 402(p)(3)(b)(iii) expresses a preference for narrative rather than numeric effluent limits, for example, by reference to ''management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.'' 33 U.S.C. 1342(p)(3)(B)(iii). EPA determines that pollutants from wet weather discharges are most appropriately controlled through management measures rather than end-of-pipe numeric effluent limitations. As explained in the Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits, issued on August 1, 1996 [61 FR 43761 (November 26, 1996)], EPA believes that the currently available methodology for derivation of numeric water quality-based effluent limitations is significantly complicated when applied to wet weather discharges from MS4s (compared to continuous or periodic batch discharges from most other types of discharge). Wet weather discharges from MS4s introduce a high degree of variability in the inputs to the models currently available for derivation of water quality based effluent limitations, including assumptions about instream and discharge flow rates, as well as effluent characterization. In addition, EPA anticipates that determining compliance with any such numeric limitations may be confounded by practical limitations in sample collection. In the first two to three rounds of permit issuance, EPA envisions that a BMP-based storm water management program that implements the six minimum measures will be the extent of the NPDES permit requirements for the large majority of regulated small MS4s. Because the six measures represent a significant level of control if properly implemented, EPA anticipates that a permit for a regulated small MS4 operator implementing BMPs to satisfy the six minimum control measures will be sufficiently stringent to protect water quality, including water quality standards, so that additional, more stringent and/or more prescriptive water quality based effluent limitations will be unnecessary. *64 FR 68753 (December 8, 1999) (emphasis added).*

- "…in light of 33 U.S.C. §1342(p)(3)(B)(iii), EPA recommends that for NPDES-regulated municipal and small construction storm water discharges effluent limits should be expressed as best management practices (BMPs) or other similar requirements, rather than as numeric effluent limits. See Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 FR 43761 (Aug. 26, 1996). The Interim Permitting Approach Policy recognizes the need for an iterative approach to control pollutants in storm water discharges. Specifically, the policy anticipates that a suite of BMPs will be used in the initial rounds of permits and that these BMPs will be tailored in subsequent rounds." *EPA Memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs." (November 22, 2002).*

- EPA's policy recognizes that because storm water discharges are due to storm events that are highly variable in frequency and duration and are not easily characterized, only in rare cases will it be feasible or appropriate to establish numeric limits for municipal and small construction storm water discharges. The variability in the system and minimal data generally available make it difficult to determine with precision or certainty actual and projected loadings for individual dischargers or groups of dischargers. Therefore, EPA believes that in these situations, permit limits typically can be expressed as BMPs, and that numeric limits will be used only in rare instances. *EPA Memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs." (November 22, 2002) (emphasis added).*

- The policy outlined in this memorandum affirms the appropriateness of an iterative, adaptive management BMP approach, whereby permits include effluent limits (e.g., a combination of structural and non-structural BMPs) that address storm water discharges, implement mechanisms to evaluate the performance of such controls, and make adjustments (i.e., more stringent controls or specific BMPs) as necessary to protect water quality. This approach is further supported by the recent report from the National Research Council (NRC), Assessing the TMDL Approach to

Water Quality Management (National Academy Press, 2001). The NRC report recommends an approach that includes "adaptive implementation," i.e., "a cyclical process in which TMDL plans are periodically assessed for their achievement of water quality standards" . . . and adjustments made as necessary. NRC Report at ES-5. *EPA Memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs." (November 22, 2002). See also 64 FR 68788.*

- This approach is consistent with the BMP approach utilized by DEQ in its industrial stormwater permitting program. *DEQ VPDES Permit Manual-Section IN-4.*

NOTE #2

Should the Small MS4 General Permit contain requirements for operators to address impaired waters in the absence of a TMDL?

Public comments requested that the General Permit be amended to include requirements for MS4s to address impaired waters and water quality standards violations even in the case that no TMDL has yet been established for the affected water. These comments cite 40 CFR § 122.4(d), which specifies that "[n]o permit may be issued…[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States," and 40 CFR § 122.44(b)(1), which requires that each NPDES permit contain effluent limitations under sections 301, 302, 303, 307, 318 and 405 of the Clean Water Act.

Response:

In accordance with the Clean Water Act, the General Permit requires that operators of small MS4s develop an MS4 program that accounts for receiving water quality through the iterative process. Among other objectives, this process is intended to ensure compliance by the operator with water quality standards. The current language of the General Permit additionally specifies that "[i]mplementation of best management practices consistent with the provisions of the MS4 Program required pursuant to this section constitutes compliance with the standard of reducing pollutants to the 'maximum extent practicable' and protects water quality in the absence of a TMDL wasteload allocation and ensures compliance by the operator with water quality standards." The Department believes that this approach is an appropriate level of consideration to be given to impaired waters until such time as a TMDL is developed. The following sources support the Department's position:

- Section 402(p)(3)(B) of the Clean Water Act specifically relates the requirements for MS4 discharges. That section requires that controls be employed to "…reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."

- EPA's 1996 Interim Permitting Policy describes how permits would implement an iterative process using BMPs, assessment, and refocused BMPs, leading toward attainment of water quality standards. The ultimate goal of the iteration would be for water bodies to support their designated uses. EPA believes this iterative approach is consistent with and implements section 301(b)(1)(C), notwithstanding the Ninth Circuit's interpretation. As an alternative to basing these water quality based requirements on section 301(b)(1)(C), however, EPA also believes the iterative approach toward attainment of water quality standards represents a reasonable interpretation of CWA section 402(p)(3)(B)(iii). For this reason, today's rule specifies that the ''compliance target'' for the design and implementation of municipal storm water control programs is ''to reduce pollutants to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA.'' The first component, reductions to the MEP, would be realized through implementation of the six minimum measures. The second component, to protect water quality, reflects the overall design objective for municipal programs based on CWA section 402(p)(6). The third component, to implement other applicable water

quality requirements of the CWA, recognizes the Agency's specific determination under CWA section 402(p)(3)(B)(iii) of the need to achieve reasonable further progress toward attainment of water quality standards according to the iterative BMP process, as well as the determination that State or EPA officials who establish TMDLs could allocate waste loads to MS4s, as they would to other point sources. *64 FR 68754 (December 8, 1999) (emphasis added).*

- EPA envisions application of the MEP standard as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards. Successive iterations of the mix of BMPs and measurable goals will be driven by the objective of assuring maintenance of water quality standards. If, after implementing the six minimum control measures there is still water quality impairment associated with discharges from the MS4, after successive permit terms the permittee will need to expand or better tailor its BMPs within the scope of the six minimum control measures for each subsequent permit. EPA envisions that this process may take two to three permit terms. *64 FR 68731 (December 8, 1999).*

- EPA has determined that water quality-based controls, implemented through the iterative processes, are appropriate for the control of pollutants and will result in reasonable further progress towards attainment of water quality standards. *64 FR 68731 (December 8, 1999).*

- EPA strongly recommends that until the evaluation of the storm water program in § 122.37 (December 10, 2012), no additional requirements beyond the minimum control measures be imposed on regulated small MS4s without the agreement of the operator of the affected small MS4, except where an approved TMDL or equivalent analysis provides adequate information to develop more specific measures to protect water quality. *40 CFR 122.34(e)(2); 4VAC50-60-400(D)(2)(f)(5)(b). See also 64 FR 68788 (December 8, 1999) (emphasis added).*

- The regulations require that "[y]ou must comply with any more stringent effluent limitations in your permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved total maximum daily load (TMDL) or equivalent analysis. The permitting authority may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality. *40 CFR 122.34(e)(1). 4VAC50-60-400(D)(2)(f)(5)(a) (emphasis added).*

NOTE #3

Do the Tributary Strategies constitute an "equivalent analysis" to a TMDL, and should they be included within the requirements of the General Permit?

Comments were received requesting that the General Permit require that MS4 operators attain pollutant reduction goals established in the Tributary Strategies. In response to a regulatory section which provides that no requirements beyond the six minimum control measures be imposed upon MS4s except in the case of an established TMDL "or an equivalent analysis," it was argued by some commentors that the Tributary Strategies constitute "an equivalent analysis" to a TMDL.

Response:

While the Department recognizes the Tributary Strategies and the implementation of the General Permit will contribute to the achievement of Strategy goals, it is not believed that the Strategies constitute "an equivalent analysis" to a TMDL sufficient to impose the reductions contemplated by the input deck to MS4 operators. While the Tributary Strategies set forth pollutant reduction goals on a watershed basis, a TMDL wasteload allocation (WLA) is discharger-specific, a necessary feature for equitable application of reduction goals to the wide variety of MS4 operators that will be covered by the General Permit. Further, the input deck of the Tributary Strategies does not account for many of the BMPs that are employed by MS4s, thus further complicating any attempt at equating it with a TMDL WLA. Points of further explanation of the Department's position include:

- "Total Maximum Daily Loads" or "TMDLs" are total amounts of a pollutant that can be assimilated into a receiving water without causing a violation of Water Quality Standards. 40 CFR 130.2 defines a "Total Maximum Daily Load" as "[t]he sum of the individual WLAs (wasteload allocations) for point sources and LAs (load allocations) for nonpoint sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. If Best Management Practices (BMPs) or other nonpoint source pollution controls make more stringent load allocations practicable, then wasteload allocations can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs."

- A "wasteload allocation (WLA)" is defined as "[t]he portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation." *40 CFR 130.2 (emphasis added).*

- The Tributary Strategies are the first step in meeting the necessary reductions of nutrients and sediments called for in the multi-state effort to improve our waters proposed in the Chesapeake Bay Agreement of 2000. The strategies themselves point out that they must "have the flexibility to address real world issues, not just the issues raised by the Chesapeake Bay Program model." It is expected that we will "learn more in the future and we will continue to refine our strategies to account for new knowledge, emerging technologies and changing conditions." *Commonwealth of Virginia Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy, January 2005, cover letter from Sec. W. Tayloe Murphy.*

- The Tributary Strategies approach needed nutrient reductions on a watershed basis. While the Tributary Strategies do further make allocations to individual significant point source dischargers, they do not make any specific allocations for individual MS4 dischargers.

- MS4 dischargers covered by the General Permit range in size from individual state and local agencies and institutions (e.g., schools, hospitals, community colleges, VDOT), to small towns (such as Bridgewater, Herndon, and Ashland) to counties (including Albemarle, York, and Stafford) to large cities (including Richmond, Alexandria, Charlottesville, Lynchburg, Suffolk and Harrisonburg). This great variance in MS4 type and size does not allow for an equitable distribution of watershed-wide reduction goals to be made among specific MS4 dischargers.

- The General Permit will contribute to the overall achievement of the goals of the Tributary Strategies. Strategy 3 is the "Consolidation and Strengthening of the Virginia Stormwater Management Program," and Strategy 4 is "Enhancing the Implementation of the Erosion and Sediment Control Program."

- The General Permit cannot address the Tributary Strategies "input deck" in its current form, as the input deck does not account for many of the BMPs included in the six minimum control measures, which include: Public Education and Outreach on Stormwater Impacts, Public Involvement/Participation, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations. Many of the other BMPs contained in the input deck are not applicable to the General Permit. *See 40 CFR 122.34(b), 4VAC50-60-400.*

Department of Conservation and Recreation Responses to EPA Comments of December 21, 2007 on the Proposed Virginia Stormwater Management Program (VSMP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

1. Include a definition for LID: while it is believed that adding a definition for LID to the stormwater regulations is beyond the scope of this regulatory action, a definition may be added by the technical advisory committee that is working on a separate regulatory action dealing with Parts II and III (stormwater technical criteria and local programs) of the regulations. Senate Bill 378, passed by the 2008 Virginia General Assembly, expands the Board's authority to require the implementation of LID and this new legislation will likewise be considered during the Part II/III regulatory process. Finally, it is of note that the term "LID" has been removed from the revised General Permit, and other language substituted in its place. (p. 11 of the 12-21-07 EPA general permit regulation markup comments to DCR)
2. Definition of "operator" is confusing when applied to the MS4 scenario: an amendment has been made to the definition to attempt clarification. (p. 17).
3. Addition of "owner or" to the definition of the term "permittee" as it applies to construction sites: may be an appropriate suggestion for the Part II/III TAC to consider, but is beyond the scope of this regulatory action. (p. 18).
4. Note that "sewage from vessels" is under consideration for permitting by EPA: noted, no change needed at this time. (p. 19)
5. Changes to definition of "small construction activity": again, may be an appropriate consideration for the Part II/III TAC, but beyond the scope of this MS4 regulation. (p. 24)
6. Changes to "stormwater discharges associated with large construction activity" and "stormwater discharges associated with small construction activity": again, not appropriate for this action. Could consider in Part II/III TAC. (p. 26-27)
7. Amendment to definition of "Total Maximum Daily Load": amendment was made. (p. 30)
8. Change definition of "water quality standards" to align with DEQ regulations: definition has been changed. (p. 32)
9. Add "WLA" in two places in 4VAC50-60-1210(A)(5)(b): this addition would not make sense, as "wasteload allocations" is included in the current sentence. Also, the language as it exists now is verbatim of 40 CFR 122.32(e)(2); the suggestion would vary the language from the CFR. (p. 36)
10. Add "or the discharge of nutrients" to 4VAC50-60-1220(C)(3): This amendment would vary the language of this subsection from that contained in 40 CFR 122.34(D)(3)(iii) and would appear to give the ability to discharge nutrients without concern in areas that have not been designated by the operator, the State Water Control Board, or the Soil and Water Conservation Board. It has not been included. (p. 38)
11. Change, "registration statement" to "application for coverage" in 4VAC50-60-1230(B): although the suggestion may not harm the regulations, the term "registration statement" is commonly known in VA as the method by which applicants apply for coverage under a general permit. It is believed that changing the terminology in this case would serve to confuse permittees without effecting any substantive improvement. It is preferred that the term "registration statement" be retained. (p. 40)

12. Add “structural and nonstructural” in front of “best management practices” in 4VAC50-60-1230(B)(7)(a), and note that the list specified by that section should include activities and a schedule for implementation: the definition of “best management practices” contained in 4VAC50-60-10 expressly includes “…both a structural and nonstructural practice”, and it is believed that the suggested addition is not necessary. Additionally, subdivision (a)(i) already requires a list of existing schedules necessary for BMP implementation, and subdivision (c) of 4VAC50-60-1230(B)(7) already requires an implementation schedule for implementation of new BMPs. It is believed that the comment is addressed by existing language. (p. 42).
13. Add “discharge characterization as described in 40 CFR 122.26(d)(1)(iv) and 122.33” to a new section numbered 4VAC50-60-1230(B)(7)(e): By its own language, 40 CFR 122.26(d)(1)(iv) is limited in application to large and medium MS4s. This general permit is applicable only to small MS4s. It is believed that all requirements of 40 CFR 122.33 are met by the existing language in the general permit. Additionally, it is believed that an EPA Region 1 general permit for small MS4s does not include the requirements of 40 CFR 122.26(d)(1)(iv). (p. 43).
14. Add “stormwater” to 4VAC50-60-1240: this amendment is believed to be contrary to the portions of the permit that do reach nonstormwater discharges, including 4VAC50-60-1240(B)(3)(c), which is found on page 58 of the EPA comment draft. (p. 45).
15. Substitute the term “permittee” for “operator” in section I, 4VAC50-60-1240(A) and throughout the general permit: it is believed that the amendments made to the definition of the term “operator” in response to a separate EPA comment address the concerns that gave rise to the suggested substitution. Usage of the term “operator” has been retained. (p. 45 and others).
16. Add “into waters of the US” to section I, 4VAC50-60-1240(A): the term “surface waters”, as defined in 4VAC50-60-10, has the same definition as “waters of the US” is given in the CFR. The suggestion has been incorporated, however, the term “surface waters” has been utilized to maintain consistency with the remainder of the general permit. (p. 46).
17. Add “in or” to the sentence including “..out of compliance” in section I, 4VAC50-60-1240(B): the suggested language has been added. (p. 47).
18. Delete “A TMDL is prepared where the waterbody is impaired” from section I, 4VAC50-60-1240(B): the language requested to be deleted is not included in the proposed general permit regulation. It is believed that this may have been a suggestion from another EPA staff member? (p. 47)
19. Add “WLA” in section I, 4VAC50-60-1240(B)(1): the suggested language has been added. (p. 47).
20. Add “WLA” in section I, 4VAC50-60-1240(B)(2)(c): the suggested language has been added. (p. 48).
21. Require that a revised local ordinance be adopted by a date certain in section I, 4VAC50-60-1240(B)(2)(c): it is not believed that authority exists within the CFR or the Virginia Stormwater Management Regulations to require specific dates for the adoption of an ordinance. Additionally, the adoption of a uniform date to be applied to all permittees is believed to be inappropriate. (p. 48).

22. Add a paragraph (d) to section I, 4VAC50-60-1240(B)(2): the intent of the suggested paragraph has been added to subsections a, b, and c. This is believed to address the concern raised, though without adding a paragraph. (p. 48).
23. Add "to reduce the discharge…to an amount consistent…" to section I, 4VAC50-60-1240(B)(3) [now (B)(2)(d)]: A November 22, 2002 memorandum from US EPA entitled "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" specifies that "EPA expects that most WQBELs for NPDES-regulated municipal and small construction storm water discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances." The requirement to meet an amount is, in essence, a numeric effluent limitation. It is believed that this would be contrary to EPA's own permitting guidance. (p. 48-49).
24. Relocate/add a paragraph (a) to section I, 4VAC50-60-1240(B): it is believed that the current location of the subject paragraph is logically correct, and that relocating it would serve to confuse permittees without any substantive gain. Pursuant to the discussion in comment 23 above, use of the term "amount" is believed to be inappropriate. (p. 50-51)
25. Add "to attain compliance with WQS" to Section II, 4VAC50-60-1240(A): the language "to ensure compliance by the operator with water quality standards" has been added. It is believed that this meets the intent of the comment. p. 52).
26. Change "appropriate" to "applicable" in Section II, 4VAC50-60-1240(A): 40 CFR 122.34 states, "…and to satisfy the <u>appropriate</u> water quality requirements of the CWA." The original language has been retained. (p. 52).
27. Delete a sentence explaining why narrative effluent limits are appropriate in Section II, 4VAC50-60-1240(A): the sentence has been deleted. (p. 52).
28. Add "Complete and timely…" to a sentence in Section II, 4VAC50-60-1240(A): as BMP implementation and refinement will be a repetitive and ongoing process, it is believed that the suggested language may cause confusion. In addition, the permittee is free to change BMPs in order to accomplish the objectives of the program when it is believed that current BMPs are not adequate. See Federal Register, Vol. 64, no. 235, page 68762 (December 8, 1999). (p. 52).
29. Add "…and attains compliance with WQS" to a sentence in Section II, 4VAC50-60-1240(A): the language "ensures compliance by the operator with water quality standards" has been added. It is believed that this meets the intent of the comment. (p. 52).
30. Remove the requirement for MS4 maps from Section II, 4VAC50-60-1240(B)(3)(b): it is recognized that MS4 maps were required to be developed during the first permit cycle. However, it continues to be possible that new systems needing permit coverage will be (and are being) discovered. Therefore, in order for the permit to be applicable to first-time permittees, the original language has been retained. (p. 56).
31. Strike "impaired" in Section II, 4VAC50-60-1240(B)(3)(b): language has been added to the referenced sentence to clarify that all waters must be mapped. It is believed that this new language accomplishes the goals of the comment. The requirement for additional notation of impaired waters has also been retained. (p. 56).
32. Reinstate language related to public/employee/business knowledge of hazards associated with illegal discharges: this language was not deleted in the proposed permit; rather, it was relocated to the section dealing with Public education and outreach on stormwater impacts (minimum control measure 1). It remains in that section. (p. 57).

33. Substitute “a MS4 program” for “procedures” in minimum control measure 4 (construction site stormwater runoff control): the term, “MS4 program” is defined in section 10 of the regulations to describe the entire program than a MS4 implements to meet permit conditions. It is believed that the goal of the comment was to achieve clarity; however, using the selected term would not accomplish that here. (p. 58).
34. Consider adding a statement encouraging the use of LID in minimum control measure 4 (construction site stormwater runoff control): the requested language has been added in subsection (a)(2) of minimum control measure 4. (p. 59).
35. Substitute “a MS4 program” for “procedures” in minimum control measure 4 (construction site stormwater runoff control): the term, “MS4 program” is defined in section 10 of the regulations to describe the entire program than a MS4 implements to meet permit conditions. It is believed that the goal of the comment was to achieve clarity; however, using the selected term would not accomplish that here. (p. 59).
36. Add “owners/” to (a)(2) of minimum control measure 4: the requested addition has been made. (p. 59).
37. Reinstate “appropriate erosion and sediment control best management practices…” in (a)(2) of minimum control measure 4: the language has been reinstated. (p. 59).
38. Add “owners/” to (a)(2) of minimum control measure 4: the requested addition has been made. (p. 60).
39. Add “owners/” to (a)(3) of minimum control measure 4: the requested addition has been made. (p. 60).
40. Add “owners/” to (b) of minimum control measure 4: the requested addition has been made. (p. 61).
41. Reinstate the word “regulatory” in (b)(2) of minimum control measure 4: the requested change has been made. (p. 62)
42. Add “owners/” to (b)(3) of minimum control measure 5: the requested addition has been made. (p. 62).
43. Add “track the total percentage and size of impervious cover added or reduced as part of the development activity” as subdivision (8) in subsection (b) of minimum control measure 5: the requested addition has not been made. Tracking this information would be onerous to permittees and would provide little benefit to the MS4 program, especially given that development sites will be treated by stormwater management facilities, which are required to be tracked. (p. 63).
44. Add “consistent with the MS4 Program Plan” to minimum control measure 6: the requested addition has been made. (p. 64).
45. Add “and waters of the United States” to (a)(1) of minimum control measure 6: the language “and receiving surface waters” has been added. This language maintains consistency throughout the permit. (p. 65).
46. Consider adding a requirement to implement integrated pest management strategies in (a)(5) of minimum control measure 6: this addition would impose requirements beyond what is stated in the CFR. It has not been included. (p. 65).
47. Add back in the “qualifying local program” title in (C): while it is true that “qualifying local program” is the title used by the CFR, the revised Virginia Stormwater Management regulations are likely to use that terminology to describe a locality-run stormwater management program. MS4 localities are one group of localities that will be required to adopt a “qualifying local program” pursuant to the revised regulations. Using the same

title here will cause confusion for permittees. While the title is changed, the majority of the language and its substance remains consistent with what is specified in the CFR. The language has not been reinstated. (p. 65-66).

48. Add a subdivision (2) describing recordkeeping requirements to (E)(1): the requested addition has been made. (p. 68).
49. Consider adding items contained in PA requirements to annual reporting requirements: items (1)-(4) are required by the current language of the permit in subsection (j) immediately above the suggestion. Items (5) and (6) are currently required by (E)(3)(a). Item (7) is included in (d) immediately above the suggestion, as it has been amended. Items (8)-(10) are currently required by (b), (c), and (d) immediately above the suggestion. (p. 69-71).
50. Add "as defined herein" to (H) in Conditions Applicable to All VSMP Permits: the requested addition has been made. (p. 75).
51. Consider moving paragraph (I)(4) in Conditions Applicable to All VSMP Permits to the section dealing with permit applications: the intent of this paragraph is to deal with incorrect information submitted pursuant to all permit requirements, and not just permit applications. The language of the paragraph has been amended to remove the specification that it applies only to permit applications. (p. 78).
52. Add "…or section 311 of the Clean Water Act" to (P) under Conditions Applicable to All VSMP Permits: the requested addition has been made. (p. 82).
53. Add "…or sludge use or disposal" to (S) under Conditions Applicable to All VSMP Permits: this MS4 permit does not authorize the use or disposal of sludge, and sludge requirements are not applicable to the permit. The requested addition has not been made. (p. 83).
54. Ensure consistency in meaning of the term "bypass" in (U) of Conditions Applicable to All VSMP Permits: the definition used in this subsection is exactly the same as that set forth in 4VAC50-60-10, and a citation to that section has been added. (p. 83).
55. Add "as defined in 4VAC50-60-10" to the definition of upset in (V) of Conditions Applicable to All VSMP Permits: the requested addition has been made. (p. 85).
56. Add a statement concerning what is not an upset to (V) of Conditions Applicable to All VSMP Permits: the requested addition has been made. (p. 85).

Department of Conservation and Recreation Responses to EPA Comments of April 21, 2008 on the Draft Final Virginia Stormwater Management Program (VSMP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

1. EPA continues to recommend that the use of low impact development (LID) techniques be advocated in the general permit. An EPA sponsored stormwater fact sheet, Incorporating Environmentally Sensitive Development Into Municipal Stormwater Programs, that was jointly developed by EPA and Region III states could be used as a resource or reference document. (Page 11 of the March 23, 2008 draft final version)

Low Impact Development/Environmental Site Design is a major component of the regulatory action currently underway to revise Parts I/II/III/XIII of the Virginia Stormwater Management Program regulations. That action is believed to be the proper place to fully deal with this concept. The General Permit does incorporate LID concepts, specifically in Minimum Control Measures 4 (construction site stormwater management) and 5 (post construction stormwater management in new development and redevelopment).

2. The word "strive" in the sentence above should be removed. The MEP portion of the standard applies to the six minimum control measures and does not remove the CWA requirement to achieve WQS. (Page 12)

The requested change has been made.

3. The sentence above should be replaced with the following, "The operator must certify to the board that the construction activity will take place and discharges of pollutants from the site are consistent with the assumptions and requirements of the TMDL." (Page 25)

The definition requested to be amended is not germane to the current regulatory action and the requested change has not been made. The request will be reviewed, however, in the current regulatory action to modify Parts I/II/III/XIII and/or in a current regulatory action to modify the General Permit for Discharges of Stormwater Associated with Construction Activities.

4. Where the operator has identified program weaknesses, we suggest that the time table for revision of ordinances and legal authorities should be a maximum duration of two years from the identification of the deficiency. (Page 48)

The requested change has been made.

5. The sentence above should read, "For properties where there is found to be a discharge of the pollutant identified in the WLA, the operator shall implement a schedule to achieve the WLA in a manner consistent with the approved TMDL". (Page 51)

This condition addresses individual properties and not the entire MS4 system as a whole. It would not be appropriate to require the WLA to be met by reductions achieved on a single site. The recommended amendment has not been made.

6. The above section II A. should read, "The operator of a regulated small MS4 must develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy to appropriate water quality requirements of the Clean Water Act. The MS4 Program must include the minimum control measures described in paragraph B of this section.

   Where TMDL WLA's or other water quality based permit limits are imposed, additional control measures beyond the minimum control measures will also be required.

   The requirements of this section and those special conditions set out in Section 1 B. also apply where a WLA is applicable." (Page 54)

The requested amendment has not been made. The language in this section that creates the difference between the current language and much of that suggested by the latest EPA comments was in fact inserted to address earlier EPA comments on the permit. Following conversations with EPA on this item, DCR feels that the existing language of this section and the permit overall, adequately addressed the points being raised in this comment.

7. We understand that tracking the acreage of land developed using LID practices is not required. However, it would be to the MS4 community's advantage to have a record of preventative measures or restoration practices (such as reduction or minimization of impervious cover). We suggest that the sentence above be retained. (Page 64)

See the response to comment 1 above. Until LID practices are defined, it will not be possible for permittees to uniformly track those practices.

8. The removed portions of sections (a) through (f) above are important to ensure adequate long term operation and maintenance of BMPs as recommended by Federal regulations at 122.34(b)(5)(c) and should be returned. (Page 65)

The information that is deleted in this section will be reported by permittees in accordance with requirements that will be set forth for local stormwater management programs by the current regulatory action that is revising Parts I/II/III/XIII of the Virginia Stormwater Management regulations. The desire is to eliminate duplicate reporting while still requiring summary information to be reported pursuant to the MS4 permit. The requested amendment has not been made.

9. The above passage should read, "As part of this evaluation, the operator shall evaluate the effectiveness of BMPs in addressing discharges into waters that are identified as impaired in the Virginia 305(b)/303(d) Water Quality Assessment Integrated Report." We assume that during the life of this permit cycle, at least one new Report will replace the 2006 report. (Page 69)

The requested amendment has been made with the exception of the removal of “2006” as a qualifier to the 305(b)/303(d) report. The administrative law of Virginia prohibits regulations from incorporating references for future, undeveloped documents. A reference to a specific, existing document is required, and if a new report is issued, the permit will need to be reopened if an updated reference is desired.